

## SEQUENCE LISTING

<110> Stanton, Jr., Vincent P.

<120> THYMIDYLATE SYNTHASE GENE SEQUENCE VARIANCES  
HAVING UTILITY IN DETERMINING THE TREATMENT  
OF DISEASE

<130> 11926-015002

<140>

<141>

<150> 09/658,659

<151> 2000-09-08

<150> 09/596,033

<151> 2000-06-15

<150> 09/357,743

<151> 1999-07-20

<150> 09/357,024

<151> 1999-07-19

<150> 60/093,484

<151> 1998-07-20

<160> 16

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 7224

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 194, 3209

<223> n = c or g

<221> misc\_feature

<222> 1136, 1334, 3150, 5551, 5934

<223> n = a or g

<221> misc\_feature

<222> 284, 1252, 1699, 5573, 5659, 5678, 5874

<223> n = c or t

<221> misc\_feature

<222> 3207

<223> n = g or t

<221> misc\_feature

&lt;222&gt; 5444

&lt;223&gt; n = c or a

&lt;400&gt; 1

aaaggttcta	aatgtctg	gggctcagag	ccggatgtca	cgctgctctc	ctctgcccgt	60
tttctcttgg	gtccttttcc	gtgccgtccc	gcgactccgc	ctctggccgc	gcgtgtctgg	120
ctgctagggc	gacaccaagg	actggccggg	taccocggaa	gaaagcacgt	gctccagcag	180
ttgccgcgcc	cagncccgag	agaggcccta	gggcgctg	ggctttcg	gtccgcagtc	240
ccccgcgac	gcgagccaac	gggagggctc	aaaagaccgc	ggcnttgtgt	ggcaggctcg	300
cctggcgctg	gctggcggtg	cccttgcccg	tcgtcacctg	tggagagcac	gtcttctctg	360
cgcgcgcctc	tgcgcaagga	ggagactcga	caacatgtca	cccgcgctcc	aagacctgtc	420
gcaacccgaa	ggtctgaaga	aaacctctgc	ggatgagatc	aatgccattc	tgcagaagag	480
gattatgggtg	ctggatggag	ggatggggac	catgatccag	cgggagaagc	taaacgaaga	540
acacttccga	ggtcaggaat	ttaaagatca	tgccaggccg	ctgaaaggca	acaatgacat	600
tttaagtata	actcagcctg	atgtcattta	ccaaatccat	aaggaatact	tgctggctgg	660
ggcagatata	attgaaacaa	atacttttag	cagcactagt	attgcccaag	ctgactatgg	720
ccttgaacac	ttggcctacc	ggatgaacat	gtgctctgca	ggagtggcca	gaaaagctgc	780
cgaggaggta	actctccaga	caggaattaa	gaggtttgtg	gcaggggctc	tgggtccgac	840
taataagaca	ctctctgtgt	ccccatctgt	ggaaaggccg	gattatagga	acatcacatt	900
tgatgagctt	gttgaagcat	accaagagca	ggccaaaagg	cttctggatg	gcggggttga	960
tatcttactc	attgaaacta	tttttgatac	tgccaatgcc	aaggcagcct	tgtttgcaact	1020
ccaaaatctt	tttgaggaga	aatatgtctc	ccggcctatc	tttatttcag	ggacgatcgt	1080
tgataaaagt	gggcggactc	tttccggaca	gacaggagag	ggatttgtca	tcagcntgtc	1140
tcattggagaa	ccactctgca	ttggattaaa	ttgtgctttg	ggtgcagctg	aaatgagacc	1200
ttttattgaa	ataattggaa	aatgtacaac	agcctatgtc	ctctgttatc	cnaatgcagg	1260
tcttcccaac	acctttgggtg	actatgatga	aacgccttct	atgatggcca	agcacctaaa	1320
ggatttttgt	atgnatggct	tggtcaatat	agttggagga	tgctgtgggt	caacaccaga	1380
tcatatcagg	gaaattgctg	aagctgtgaa	aaattgtaag	cctagagttc	cacctgccac	1440
tgcttttgaa	ggacatatgt	tactgtctgg	tctagagccc	ttcaggattg	gaccgtacac	1500
caactttgtt	aacattggag	agcgtctgaa	tggtgcagga	tcaagggaagt	ttgctaaaact	1560
catcatggca	ggaaactatg	aagaagcctt	gtgtgttgcc	aaagtgcagg	tggaaatggg	1620
agcccagggtg	ttggatgtca	acatggatga	tggcatgcta	gatggtccaa	gtgcaatgac	1680
cagattttgc	aacttaatng	cttccgagcc	agacatcgca	aaggtacctt	tgtgcatcga	1740
ctcctccaat	tttgcctgta	ttgaagctgg	gttaaagtgc	tgccaaggga	agtgcattgt	1800
caatagcatt	agtctgaagg	aaggagagga	cgacttcttg	gagaaggcca	ggaagattaa	1860
aaagtatagga	gctgctatgg	tggtcatggc	ttttgatgaa	gaaggacagg	caacagaaac	1920
agacacaaaa	atcagagtgt	gcaccggggc	ctaccatctg	cttgtgaaaa	aactgggctt	1980
taatccaaat	gacattattt	ttgacctaa	tatcctaacc	attgggactg	gaatggagga	2040
acacaacttg	tatgccatta	attttatcca	tgcaacaaaa	gtcattaaag	aaacattacc	2100
tggagccaga	ataagtggag	gtctttccaa	cttgtccttc	tccttccgag	gaatggaagc	2160
cattcgagaa	gcaatgcatg	gggttttcct	ttaccatgca	atcaagtctg	gcatggacat	2220
ggggatagtg	aatgctggaa	acctccctgt	gtatgatgat	atccataagg	aacttctgca	2280
gctctgtgaa	gatctcatct	ggaataaaga	ccctgaggcc	actgagaagc	tcttacgtta	2340
tgcccagact	caaggcacag	gagggaaaga	agtcattcag	actgatgagt	ggagaaatgg	2400
ccctgtcgaa	gaacgccttg	agtatgccct	tgtgaagggc	attgaaaaac	atattattga	2460
ggatactgag	gaagccagggt	taaacccaaa	aaaatatccc	cgacctctca	atataattga	2520
aggacccctg	atgaatggaa	tgaaaattgt	tggtgatctt	tttggagctg	gaaaaatggt	2580
tctacctcag	gttataaagt	cagcccggggt	tatgaagaag	gctgttgccc	accttatccc	2640
tttcatggaa	aaagaaagag	aagaaaccag	agtgcctaac	ggcacagtag	aagaagagga	2700
cccttaccag	ggcaccatcg	tgctggccac	tgttaaaggc	gacgtgcacg	acataggcaa	2760
gaacatagtt	ggagttagtcc	ttggctgcaa	taatttccga	gttattgatt	taggagtcac	2820
gactccatgt	gataagatac	tgaagctg	tcttgaccac	aaagcagata	taattggcct	2880
gtcaggactc	atcactcctt	ccctggatga	aatgattttt	gttgccaagg	aatggagag	2940
attagctata	aggattccat	tgttgattgg	aggagcaacc	acttcaaaaa	cccacacagc	3000
agttaaaata	gctccgagat	acagtgcacc	tgtaatccat	gtcctggacg	cgtccaagag	3060
tgtgggtgggtg	tgttcccagc	tgttagatga	aaatctaaag	gatgaatact	ttgaggaaat	3120
catggaagaa	tatgaagata	ttagacaggn	ccattatgag	tctctcaagg	agaggagata	3180

096333-092404

cttaccctta	agtcaagcca	gaaaaantng	tttccaaatg	gattggctgt	ctgaacctca	3240
cccagtgaag	cccacgttta	ttgggaccca	ggtctttgaa	gactatgacc	tgcagaagct	3300
ggtggactac	attgactgga	agcctttctt	tgatgtctgg	cagctccggg	gcaagtaccc	3360
gaatcgaggc	tttcccaaga	tatttaacga	caaaacagta	ggtggagagg	ccaggaaggt	3420
ctacgatgat	gcccacaata	tgctgaacac	actgattagt	caaaagaaac	tccgggcccg	3480
gggtgtgggt	gggttctggc	cagcacagag	tatccaagac	gacattcacc	tgtacgcgga	3540
ggctgctgtg	ccccaggctg	cagagcccat	agccaccttc	tatgggttaa	ggcaacaggc	3600
tgagaaggac	tctgccagca	cggagccata	ctactgcctc	tcagacttca	tgcctccctt	3660
gcattctggc	atccgtgact	acctgggcct	gtttgccgtt	gcctgctttg	gggtagaaga	3720
gctgagcaag	gcctatgagg	atgatgggtg	cgactacagc	agcatcatgg	tcaaggcgct	3780
gggggacccg	ctggcagagg	cctttgcaga	agagctccat	gaaagagttc	gccgagaact	3840
gtgggacctac	tgtggcagtg	agcagctgga	cgtcgcagac	ctgcgcaggc	tgcggtacaa	3900
gggcattccgc	ccggctcctg	gctaccccag	ccagcccagc	cacaccgaga	agctcaccat	3960
gtggagactt	gcagacatcg	agcagctctac	aggcattagg	ttaacagaat	cattagcaat	4020
ggcacctgct	tcagcagttc	caggcctcta	cttctccaat	ttgaagtcca	aatatTTTTgc	4080
tgtggggaag	atttccaagg	atcaggttga	ggattatgca	ttgaggaaga	acatatctgt	4140
ggctgaggtt	gagaaatggc	ttggacccat	tttgggatat	gatacagact	aactTTTTtt	4200
TTTTTTgcct	TTTTtattct	tgatgatcct	caaggaaaata	caacctagggt	tgccttaaaa	4260
ataacaacaa	caaaaaacct	gtgtgcatct	ggctgacact	tccctgcttc	tggTTTTtga	4320
agactatttta	gtggaacctt	gtagaggagc	agggctcttc	tgcagtgcct	ggaaaacagg	4380
cgctgttttt	ttgggacctt	gcgtgaagag	cagtgcagag	ggttcctgtg	gtttccctgg	4440
tccctctgag	atggggacag	actgaagaca	gaggtcgttt	gatttcaaaag	caagtcaacc	4500
tgctTTTTtc	tgtTTTTtaca	gtggaatcta	ggaggccact	tagtcgtctt	TTTTtctct	4560
tagaagaaaa	gcctgaaact	gagttgaata	gagaagtgtg	accctgtgac	aaaatgatac	4620
tgtgagaaat	ggggcatttt	aatctaagtg	gttataacag	tggattctga	cggggaaggt	4680
gtagctctgt	tctcttcgga	agacctcgtt	ttctaaaggc	tggactaaat	ggctgcagaa	4740
ctcccttttg	caaaaggcat	gcgtcactg	cttgcttgtc	agaaacactg	aagccatttg	4800
ccccagtgtg	gtcaagcagc	catgctttct	gggcattttc	gtcctcccat	aatttcatat	4860
ttccgtaccc	ctgaggaaac	aaaaaggaaa	tgaggagaga	aagttactgt	taagggtggg	4920
taacattttt	ttagttttgt	tttgttttgg	TTTTTTTTtt	tttgagacag	agtcctggctc	4980
tgtcgcgccg	gctggagtgc	aggggcgcga	tctcggctca	tagcaagctc	cgctcctggg	5040
gttcatgcca	ttctcctgcc	tcagcctcca	gagtagctgg	gactacaggt	gcccgcacc	5100
acaccggct	aattttttgt	gtttttacaa	aatacaaaaa	agtagagaca	ggatttccat	5160
gtgttagcca	ggatggctct	gatctcccga	cctcgtgata	tgcccacctc	agcctcccaa	5220
aatgctggga	ttacaggcgt	gagccaccga	gcctggccgg	ttacatctct	ttaatgtttt	5280
ccaggattga	gcaggttctc	agctgggcctc	tgatatcccg	tgcggagtgt	gacaagtggg	5340
cagcataaag	tcactcatct	cttaccattt	tattcccctc	aattctcaat	atattcagta	5400
atgaagaatg	gtgccaccac	tcaagcaaca	agcctcaaac	tcancatgt	catcttttcc	5460
ttggatgatt	gcagttattt	caaaaaattg	catgcaaaat	atacactcat	cctacttcaa	5520
gatgggtggg	gcaatagtca	ggagaaggta	ncattggagt	cctggtttga	ttngaaggat	5580
gaagacgaag	aagcaaggga	ggaacaaatg	aagaaccatc	tttgttcatg	aataggaata	5640
ttcaagatta	taaaggtanc	aggtctccta	aaattganct	atggatttaa	taccattttc	5700
aatggaaatt	ccaacagatt	ttattgaatg	aaacaagcag	gtgtttatat	ggagtagcaa	5760
aggacttaaa	attaccaaat	gcttctaaat	atgaaggaga	ggttggggac	acgcacccta	5820
tgtgatacca	agttttattg	tcaagacagt	gtcatgggtc	agaggtaggc	attntgagca	5880
ggggaacaaa	ataagggcct	agaaactcac	ccgtgcata	gttgaccttt	gcanaatgac	5940
ctggtgacat	ggcaagtccg	tggggacagg	aaggaccact	ccctaagtaa	tccagaaca	6000
atggctatcc	atgtgggaaa	aaaagaaatt	ttactttctc	tcaccttacc	tggtgataag	6060
ttccaaatat	gttaagggct	ttaatacaaa	aagcaaaaat	tgtcagtgtt	tggatgaaaa	6120
aagccttagg	gcaggaaaga	atctcttgag	acataaagta	gtaatcataa	aggacaagat	6180
ggttaagtca	attctgttaa	aactcaaggc	ttatattaag	caaacacttg	aagtgagaag	6240
atgatccaca	acttgagaag	acattttataa	tacaaaataac	tgatgaagga	ttcataatca	6300
caaatataga	gaattcctat	ttaaaaaaat	agaaaaatag	tgaagactac	acaagaggaa	6360
atagggcttt	taaataaata	gatgtttctg	agcattgggtc	agggaaatat	gaattaggac	6420
cacaatgaga	ttccatttta	tatccataag	atttgcaag	gttgggtctg	acagtaccag	6480
ttgttagatc	tgtagggtact	tgtacaacat	tgtggatagt	taaacaggga	ccactgcttt	6540
aaaaacaat	tatcccttac	agacttgaac	atttgcagac	cttatgatct	tgttccaac	6600

```
<210> 2
<211> 6972
<212> DNA
<213> Homo sapiens
```

```
<221> misc_feature
<222> 4799, 5455
<223> n = a or g
```

<400> 2							
cgcccccgcc	tctgagctcc	cttcccatgg	cggccctagt	gttgaggagac	gggtcgggtcc		60
tgcgggggcca	gcccttttggg	gccgcgcgtgt	cgactgccgg	ggaagtgggtg	tttcaaaccg		120
gcatgggtcgg	ctacccccgag	gccctcactg	atccctccta	caaggcacag	atcttagtgc		180
tcacctatcc	tctgatcggc	aactatggca	tccccccaga	tgaaatggat	gagttcggtc		240
tctgcaagtg	gtttgaatcc	tcgggcattcc	acgtagcagc	actggtagtg	ggagagtgc		300
gtctactacc	cagccactgg	agtgccaccc	gcacctgca	tagtggctg	cagcagcatg		360
gcatccctgg	cttgcaagga	gtagacactc	gggagctgac	caagaagttg	cgggaacagg		420
gggtctctgct	ggggaagctg	gtccagaatg	gaacagaacc	ttcatccctg	ccattcttgg		480
acccaatgc	ccgccccctg	gtaccagagg	tctccattaa	gactccacgg	gtattcaata		540
caggggggtgc	ccctcggatc	cttgcttttg	actgtggcct	caagtataat	cagatccgat		600
gcctctgcca	gcgtgggggt	gaggtcactg	tggtagcctg	ggaccatgca	ctagacagcc		660
aagagtatga	gggtctcttc	ttaagtaatg	ggcctggatg	ccctgcctcc	tatcccagtg		720
togtatccac	actgagccgt	gttttatctg	agcctaattcc	ccgactgtgc	tttgggatct		780
gcctggggaca	ccagctattg	gccttagcca	ttggggccaa	gacttacaag	atgagatatg		840
ggaaccgagg	ccataaccag	ccctgcttgt	tgggtgggctc	tggggcgctgc	tttctgacat		900
cccagaacca	tgggttttgct	gtggagacag	actcactgcc	agcagactgg	gctcctctct		960
tcaccaacgc	caatgatggg	tccaatgaag	gcattgtgca	caacagcttg	cctttcttca		1020
gtgtccagtt	tcacccagag	caccaagctg	gcccttcaga	tatggaactg	cttttcgata		1080
tctttctgga	aactgtgaaa	gaggccacag	ctgggaaccc	tggggggccag	acagttagag		1140
agcggtcgac	tgagcgctc	tgccccctg	ggattccac	tcccggtctc	ggacttccac		1200
caccacgaaa	ggttctgac	ctgggctcag	ggggcctctc	cattggccaa	gctggagaat		1260
ttgactactc	gggtctcag	gcaattaaag	cctgaagga	ggaaaacatc	cagacgttgc		1320
tgatcaaccc	caatattgcc	acagtgcaga	cctcccaggg	gctggccgac	aagggtctatt		1380
ttcttcccat	aacacctcat	tatgtaaccc	aggtgatacg	taatgaacgc	cccgatgggtg		1440
tgttactgac	ttttgggggc	cagactgtct	tgaactgtgg	tgtggagctg	accaaggccg		1500
gggtgctggc	tcggtatggg	gtccgggtcc	tgggcacaac	agtggagacc	attgagctga		1560
ccgaggatcg	acggggcctt	gctgccagaa	tggcagagat	cggagagcat	gtggccccga		1620
gcgagggcagg	aaattctctt	gaacaggccc	aggcagccgc	tgaacggctg	gggtaccctg		1680
tctagtgcg	tgcagccctt	gccgtgggtg	gcctggctc	tggctttgcc	ctaacagggg		1740
aqgaqctctc	tgtctctctg	gccccagctt	ttgcccatac	cagccaagtg	ctagtagaca		1800

agtctctgaa	gggatggaag	gagattgagt	acgaggtggt	gagagacgcc	tatggcaact	1860
gtgtcacggt	gtgtaacatg	gagaacttgg	acccactggg	catccacact	ggtgagtcca	1920
tagtggtggc	ccctagccag	acactgaatg	acagggagta	tcagctcctg	aggcagacag	1980
ctatcaaggt	gacccagcac	ctgggaattg	ttggggagtg	caatgtgcag	tatgccttga	2040
accctgagtc	tgagcagtat	tacatcattg	aagtgaatgc	caggctctct	cgcagctctg	2100
ccctggccag	taaggccaca	ggttatccac	tggcttatgt	ggcagccaag	ctagcattgg	2160
gcatcccttt	gcctgagctc	aggaactctg	tgacaggggg	tacagcagcc	tttgaaccca	2220
gcgtggatta	ttgtgtggtg	aagattcctc	gatgggacct	tagcaagttc	ctgcgagtca	2280
gcacaaagat	tgggagctgc	atgaagagcg	ttggtgaagt	catgggcatt	gggcgttcat	2340
ttgaggaggc	cttccagaag	gccctgcgca	tgggtgatga	gaactgtgtg	ggctttgatc	2400
acacagtga	accagtccag	gatatggagt	tggagactcc	aacagataag	cggattttttg	2460
tgggtggcagc	tgctttgttg	gctgggttatt	cagtgggaccg	cctgtatgag	ctcacacgca	2520
tcgaccgctg	gttccctgcac	cgaatgaagc	gtatcatcgc	acatgccacg	ctgctagaac	2580
aacaccgtgg	acagcctttg	ccgccagacc	tgctgcaaca	ggccaagtgt	cttggcttct	2640
cagacaaaca	gattgccctt	gcagttctga	gcacagagct	ggctgttcgc	aagctgcgtc	2700
aggaactggg	gatctgtcca	gcagtgaaac	agattgacac	agttgcagct	gagtggccag	2760
cccagacaaa	ttacctatac	ctaacgtatt	ggggcaccac	ccatgacctc	acctttcgaa	2820
cacctcatgt	cctagtcctt	ggctctggcg	tctaccgtat	tggctccagt	gttgagtttg	2880
actggtgtgc	tgtaggctgc	atccagcagc	tccgaaagat	gggatataag	accatcatgg	2940
tgaactataa	cccagagaca	gtcagcaccg	actatgacat	gtgtgatcga	ctctactttg	3000
atgagatctc	ttttggagtg	gtgatggaca	tctatgagct	cgagaacctt	gaaggtgtga	3060
tcctatccat	gggtggacag	ctgcccaaca	acatggccat	ggcgtttgcat	cggcagcagt	3120
gccgggtgct	gggcacctcc	cctgaagcca	ttgactcggc	tgagaaccgt	ttcaagtttt	3180
cccggctcct	tgacaccatt	ggtatcagcc	agcctcagtg	gagggagctc	agtgacctcg	3240
agtctgctcg	ccaattctgc	cagaccgtgg	ggtaccctcg	tgtggtgcgc	ccctcctatg	3300
tgctgagcgg	tgctgctatg	aatgtggcct	acgcggatgg	agacctggag	cgcttcctga	3360
gcagcgcagc	agccgtctcc	aaagagcatc	ccgtggtcat	ctccaagttc	atccaggagg	3420
ctaaggagat	tgangtggat	gccgtggcct	ctgatggtgt	ggtggcagcc	atcgccattc	3480
ctgagcatgt	ggagaatgca	ggtgtgcatt	caggtgatgc	gacgctggtg	acccccccac	3540
aagatatcac	tgccaaaacc	ctggagcggg	tcaaagccat	tgtgcatgct	gtggggccagg	3600
agctacaggt	cacaggaccc	ttcaatctgc	agctcattgc	caaggatgac	cagctgaaag	3660
ttattgaatg	caacgtacgt	gtctctcgct	ccttccccct	cgtttccaag	acactgggtg	3720
tggacctagt	agccttggcc	acgcgggtca	tcatggggga	agaagtggaa	cctgtggggc	3780
taatgactgg	ttctggagtc	gtgggagtaa	aggtgcctca	gttctccttc	tcccgtctgg	3840
cgggtgctga	cgtggtgttg	ggtgtggaaa	tgaccagtac	tggggaggtg	gccggctttg	3900
gggagagccg	ctgtgaggca	tacctcaagg	ccatgctaag	cactggcttt	aagatcccca	3960
agaagaatat	cctgctgacc	attggcagct	ataagaacaa	aagcgagctg	ctcccaactg	4020
tgcggctact	ggagagcctg	ggctacagcc	tctatgccag	tctcggcaca	gctgacttct	4080
acactgagca	tggcgtcaag	gtaacagctg	tggactggca	ctttgaggag	gctgtggatg	4140
gtgagtgcgc	accacagcgg	agcatcctgg	agcagctagc	tgagaaaaac	tttgagctgg	4200
tgattaacct	gtcaatgcgt	ggagctgggg	gccggcgtct	ctcctccttt	gtcaccaagg	4260
gctaccgcac	ccgacgcttg	gccgctgact	tctccgtgcc	cctaatactc	ganatcaagt	4320
gcaccaaact	ctttgtggag	gccctaggcc	agatcggggc	agccccctct	ttgaaggtgc	4380
atgttgactg	tatgacctcc	caaaagcttg	tgcgactgcc	gggattgatt	gatgtccatg	4440
tgcacctgcg	ggaaccaggt	gggacacata	aggaggactt	tgcttcaggc	acagccgctg	4500
ccctggctgg	gggtatcacc	atggtgtgtg	ccatgcctaa	taccgggcc	cccatcattg	4560
acggccctgc	tctggccctg	gcccagaagc	tggcagaggc	tggcgcccg	tgcgactttg	4620
cgtattcctc	tggggcctcg	tctgaaaaatg	caggaaacctt	gggcaccgtg	gccgggtctg	4680
cagccgggct	gaagctttac	ctcaatgaga	ccttctctga	gctgcggctg	gacagcgtgg	4740
tccagtggat	ggagcatttc	gagacatggc	cctcccacct	ccccattgtg	gctcacgcng	4800
agcagcaaac	cgtggctgct	gtcctcatgg	tggctcagct	cactcagcgc	tcagtgcaca	4860
tatgtcacgt	ggcacggaag	gaggagatcc	tgctaattaa	agctgcaaa	gcacggggct	4920
tgccagtgac	ctgcgaggtg	gctccccacc	acctgttcc	aagccatgat	gacctggagc	4980
gcctggggcc	tgggaagggg	gaggtccggc	ctgagcttgg	ctcccggccg	gatgtggaag	5040
ccctgtggga	ggacatggct	gtcatcgact	gctttgcctc	agaccatgct	ccccatacct	5100
tggaggagaa	gtgtgggtcc	aggccccac	ctgggttccc	agggttagag	accatgctgc	5160
cactactcct	gacggctgta	agcgagggcc	ggctcagcct	ggacgacctg	ctgcagcgat	5220

tgcaccacaa	tctctggcgc	atctttcacc	tgcnccegc	ggaggacacc	tatgtggagg	5280
tggatctgga	gcatgagtgg	acaattccca	gccacatgcc	cttctccaag	gcccactgga	5340
caccttttga	agggcagaaa	gtgaaggga	cgtccgccc	tgtggtcctg	cgaggggagg	5400
ttgcctatat	cgatgggcag	gttctggtac	ccccgggcta	tggacaggat	gtacngaagt	5460
ggccacaggg	ggctgttctt	cagctcccac	cctcagcccc	tgccacnagt	gagatgacca	5520
cgacacctga	aagaccccg	cgtggcatcc	cagggcttcc	tgatggccgc	ttccatctgc	5580
cgccccgaat	ccatcgagcc	tccgaccag	gtttgccagc	tgaggagcca	aaggagaagt	5640
cctctcgga	ggtagccgag	ccagagctga	tgggaacccc	tgatggcacc	tgctaccctc	5700
caccaccagt	accgagacag	gcatctcccc	agaacctggg	gacccctggc	ttgctgcacc	5760
cccagacctc	acccctgctg	cactcattag	tgggccaaca	tatcctgtcn	gtccagcagt	5820
tcaccaagga	tcagatgtct	cacctgttca	atgtggcaca	cacactgcgt	atgatggtgc	5880
agaaggagcg	gagcctcgac	atcctgaagg	ggaagggtac	ggcctccatg	ttctatgaag	5940
tgagcacacg	gaccagcagc	tcctttgcag	cagccatggc	ccggctggga	ggtgctgtgc	6000
tcagcttctc	ggaagccaca	tcgtccgtcc	agaaggcgca	atccctggct	gactccgtgc	6060
agaccatgag	ctgctatgcc	gacgtcgtcg	tgctccggca	ccccagcct	ggagcagtgg	6120
agctggcngc	caagcactgc	cggaggccag	tgatcaatgc	tggggatggg	gtcggagagc	6180
acccacacca	ggccctgctg	gacatcttca	ccatccgtga	ggagctggga	actgtcaatg	6240
gcatgacgat	cacgatgggtg	ggtgacctga	agcacggacg	cacagtacat	tccctggcct	6300
gctgtctcac	ccagtatcgt	gtcagcctgc	gctacgtggc	acctcccagc	ctgcgcacgc	6360
caccactgtg	gcgggccttc	gtggcctccc	gcggcaccaa	gcaggaggaa	ttcgagagca	6420
ttgaggagcg	gctgcctgac	actgatgtgc	tctacatgac	tcgaatccag	aaggaaacgat	6480
ttggctctac	ccaggagtac	gaagcttgct	ttggtcagtt	catcctcact	ccccacatca	6540
tgaccggggc	caagaagaag	atggtggtga	tgaccccgat	gccccgtgtc	aacgagataa	6600
gcgtggaagt	ggactcggat	ccccngcag	cctacttccg	ccaggctgag	aacggcatgt	6660
acatccgcac	ggctctgtta	gccacngtgc	tgggcccgtt	ctaggggcct	ggcttccctc	6720
gcctcttctc	tttaggccca	gctgctgggc	aaggaaattcc	agtgcctcct	acgggggcag	6780
cacacttaga	tattcctgga	catccagatt	gctcacatgt	gctgaccaca	cttcaggetc	6840
tggactggag	ctctctggca	tgggggtggg	gcctcagatg	ctggggccca	gtctgcccc	6900
tcttcattcc	tgacacctaa	acctgtacag	tcatttttct	actgacttaa	taaacagccg	6960
agctgtccct	tg					6972

&lt;210&gt; 3

&lt;211&gt; 3951

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; 166, 3432, 3682, 3937

&lt;223&gt; n = t or c

&lt;221&gt; misc\_feature

&lt;222&gt; 577, 638, 1708, 3730, 3925

&lt;223&gt; n = a or g

&lt;400&gt; 3

gctgtcactt	ggctctctgg	ctggagcttg	aggacgcaag	gagggtttgt	cactggcaga	60
ctcgagactg	taggcactgc	catggcccct	gtgctcagta	aggactcggc	ggacatcgag	120
agtatcctgg	ctttaaatcc	tcgaacacaa	actcatgcaa	ctctgngttc	cacttcggcc	180
aagaaattag	acaagaaaca	ttggaaaaga	aatcctgata	agaactgctt	taattgtgag	240
aagctggaga	ataattttga	tgacatcaag	cacacgactc	ttggtgagcg	aggagctctc	300
cgagaagcaa	tgagatgcct	gaaatgtgca	gatgccccgt	gtcagaagag	ctgtccaaact	360
aatcttgata	ttaaattcatt	catcacaaat	attgcaaaca	agaactatta	tggagctgct	420
aagatgatag	tttctgacaa	cccacttggt	ctgacttgtg	gaatgggtatg	tccaacctct	480
gatctatgtg	taggtggatg	caatttatat	gccactgaag	agggacccat	taatattggt	540
ggattgcagc	aatttgctac	tgaggtattc	aaagcantga	gtatcccaca	gatcagaaat	600
ccttcgctgc	ctccccaga	aaaaatgtct	gaagcctntt	ctgcaaagat	tgctcttttt	660

0956333-092401

ggtgctgggc	ctgcaagtat	aagttgtgct	tccttttttg	ctcgattggg	gtactctgac	720
atcactatat	ttgaaaaaca	agaatatggt	ggtgggttaa	gtacttctga	aattcctcag	780
ttccggctgc	cgtatgatgt	agtgaatttt	gagattgagc	taatgaagga	ccttggtgta	840
aagataat	gcggtaaaag	ccttttcagtg	aatgaaatga	ctcttagcac	tttgaaagaa	900
aaaggctaca	aagctgcttt	cattggaata	ggtttgccag	aacccaataa	agatgccatc	960
ttccaaggcc	tgacgcagga	ccaggggttt	tatacatcca	aagacttttt	gccacttgta	1020
gccaaaggca	gtaaagcagg	aatgtgcgcc	tgtcactctc	cattgccatc	gatacgggga	1080
gtcgtgattg	tacttgagc	tggagacact	gccttcgact	gtgcaacatc	tgctctacgt	1140
tgtggagctc	gccgagtgtt	catcgtcttc	agaaaaggct	ttgttaatat	aagagctgtc	1200
cctgaggaga	tggagcttgc	taagggaagaa	aagtgtgaat	ttctgccatt	cctgtcccca	1260
cgggaaggta	tagtaaaagg	tgggagaatt	gttgctatgc	agtttgttcg	gacagagcaa	1320
gatgaaactg	gaaaatggaa	tgaagatgaa	gatcagatgg	tccatctgaa	agccgatgtg	1380
gtcatcagtg	ccttttggttc	agttctgagt	gatcctaaag	taaaagaagc	cttgagccct	1440
ataaaattta	acagatgggg	tctcccagaa	gtagatccag	aaactatgca	aactagtga	1500
gcatgggtat	ttgcaggtgg	tgatgtcgtt	ggtttggcta	acactacagt	ggaatcggtg	1560
aatgatggaa	agcaagcttc	ttggtacatt	cacaaatagc	tacagtcaca	atatggagct	1620
tcctgtttctg	ccaagcctga	actacccttc	ttttacactc	ctattgatct	ggtggacatt	1680
agtgtagaaa	tggccggatt	gaagttnta	aatccttttg	gtcttgctag	cgcaactcca	1740
gccaccagca	catcaatgat	tcgaagagct	tttgaagctg	gatgggggtt	tgccctcacc	1800
aaaactttct	ctcttgataa	ggacattgtg	acaaatgttt	cccccagaat	catccgggga	1860
accacctctg	gccccatgta	tggccctgga	caaagctcct	ttctgaatat	tgagctcatc	1920
agtgagaaaa	cggctgcata	ttggtgtcaa	agtgctcactg	aactaaaggc	tgacttccca	1980
gacaacattg	tgattgctag	cattatgtgc	agttacaata	aaaatgactg	gacggaactt	2040
gccaagaagt	ctgaggatc	tggagcagat	gccctggagt	taaatttatc	atgtccacat	2100
ggcatgggag	aaagaggaat	gggcctggcc	tgtgggcagg	atccagagct	ggtgcggaac	2160
atctgccgct	gggttaggca	agctgttcag	attccttttt	ttgccaaagct	gaccccaaat	2220
gtcactgata	ttgtgagcat	cgcaagagct	gcaaagggaag	gtgggtgcaa	tggcggtaca	2280
gccaccaaca	ctgtctcagg	tctgatggga	ttaaaatctg	atggcacacc	ttggccagca	2340
gtggggattg	caaagcgaac	tacatatgga	ggagtgtctg	ggacagcaat	cagacctatt	2400
gcttttgagag	ctgtgacctc	cattgctcgt	gctctgcctg	gatttcccat	tttggctact	2460
ggtggaattg	actctgctga	aagtggctct	cagtttctcc	atagtgggtg	ttccgtcttc	2520
caggtatgca	gtgccattca	gaatcaggat	ttcactgtga	tcgaagacta	ctgcaactggc	2580
ctcaaagccc	tgctttatct	gaaaagcatt	gaagaactac	aagactggga	tggacagagt	2640
ccagctactg	tgagtcacca	gaaagggaaa	ccagttccac	gtatagctga	actcatggac	2700
aagaaactgc	caagtttttg	accttatctg	gaacagcgca	agaaaaatcat	agcagaaaaac	2760
aagattagac	tgaagaaca	aaatgtagct	ttttcaccac	ttaagagaag	ctgtttttatc	2820
cccaaaaggc	ctattcctac	catcaaggat	gtaaatggaa	aagcactgca	gtaccttgga	2880
acatttgggtg	aattgagcaa	cgtagagcaa	gttgtggcta	tgattgatga	agaaatgtgt	2940
atcaactgtg	gtaaatgcta	catgacctgt	aatgattctg	gctaccaggc	tatacagttt	3000
gatccagaaa	cccacctgcc	caccataacc	gacacttgta	caggctgtac	tctgtgtctc	3060
agtgtttgcc	ctattgtcga	ctgcatcaaa	atggtttcca	ggacaacacc	ttatgaacca	3120
aagagaggcg	tacccttatc	tgtgaatccg	gtgtgttaag	gtgatttgtg	aaacagttgc	3180
tgtgaacttt	catgtcacct	acatatgctg	atctcttaaa	atcatgatcc	ttgtgttcag	3240
ctctttccaa	attaaaaaca	atatacattt	tctaaataaa	aatatgtaat	ttcaaaatac	3300
atttgaagt	gtaaaaaatg	tctcatgtca	atgaccattc	aattagtggc	ataaaataga	3360
ataattcttt	tctgaggata	gtagttaaat	aactgtgtgg	cagttaattg	gatgttccact	3420
gccagttgtc	tnatgtgaaa	aattaaacttt	ttgtgtggca	attagtgtga	cagtttccaa	3480
attgccctat	gctgtgctcc	atatttgatt	tctaattgta	agtgaattaa	agcattttga	3540
aacaaagtac	tctttaacat	acaagaaaat	gtatccaagg	aaacatttta	tcaataaaaa	3600
ttacctttaa	ttttaatgct	gtttctaaga	aaatgtagtt	agctccataa	agtacaaatg	3660
aagaaagtca	aaaattat	gntatggcag	gataagaaaag	cctaaaattg	agtttgtgga	3720
ctttattaan	taaaatcccc	ttcgtgaaa	ttgcttat	ttgggtgttg	atagaggata	3780
gggagaatat	ttactaacta	aataccattc	actactcatg	cgtgagatgg	gtgtacaaac	3840
tcatectctt	ttaatggcat	ttctctttaa	actatgttcc	taaccaaatg	agatgatagg	3900
atagatcctg	gttaccactc	ttttnctgtg	cacatanggg	ccccggaatt	c	3951

<211> 2816  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 175, 1067  
 <223> n = g or a

<221> misc\_feature  
 <222> 341  
 <223> n = c or g

<221> misc\_feature  
 <222> 791, 1997, 2618, 2653  
 <223> n = t or c

<221> misc\_feature  
 <222> 1337  
 <223> n = c or a

<221> misc\_feature  
 <222> 2107  
 <223> nucleotide in position 2107 is g, or absent

<221> misc\_feature  
 <222> 2583  
 <223> n = t or g

<400> 4

ggggcgggtc	cgaggagcccc	agggcagccg	ccccgcggag	tcgcaggcac	agtgtcacct	60
tcgtcccttc	cgagagctgca	ctgtggcctga	gcaggatggt	gccctccagc	ccagcgggtgg	120
agaagcaggt	gcccgtggaa	cctgggcctg	accccgagct	ccggtcctgg	cggnccctcg	180
tgtgctacct	ttgtctctac	ggcttcatgg	cgagatacgy	gccaggggag	agcttcatca	240
ccccctacct	cctggggccc	gacaagaact	tcacgcggga	gcaggtcacg	aacgagatca	300
cgccgggtgct	gtcgtactcc	tacctggccg	tgtgtgtgcc	ngtgttcctg	ctcaccgact	360
acctgcgcta	cacgccgggtg	ctgctgctgc	aggggctcag	cttcgtgtcg	gtgtggctgc	420
tgctgtctg	gggccaactcg	gtggcgca	tgcagctcat	ggagctcttc	tacagcgtca	480
ccatggccgc	gcgcactcgcc	tattcctcct	acatcttctc	tctcgtgcgg	cccgcgcgct	540
accagcgtgt	ggccggctac	tcgcgcgctg	cggtgctgct	gggcgtgttc	accagctccg	600
tgctgggcca	gctgctgggtc	actgtgggcc	gagtctcctt	ctccacgctc	aactacatct	660
cgctggcctt	cctcaccttc	agcgtgggtc	tcgccctcct	cctgaagcgc	cccaagcgca	720
gcctcttctt	caaccgcgac	gaccgggggc	ggtgcgaaac	ctcggcttcg	gagctggagc	780
gcatgaatcc	ngggccaggc	gggaagctgg	gacacgcctt	gcgggtggcc	tgtggggact	840
cagtgtctggc	gcggatgctg	cgggagctgg	gggacagcct	gcggcgggccg	cagctgcgcc	900
tgtgttccct	ctggtgggtc	ttcaactcgg	ccggctacta	cctggtgggtc	tactacgtgc	960
acatcctgtg	gaacgaggtg	gacccacca	ccaacagtgc	gcgggtctac	aacggcgcg	1020
cagatgtctg	ctccacgctg	ctgggcgcca	tcacgtcctt	cgccgcnggc	ttcgtgaaga	1080
tcgctgtggc	gcgctgggtc	aagctgtctc	tcgcgggcgt	cacggccacg	caggcggggc	1140
tggtcttctt	tctggcgcac	acgcgccacc	cgagcagcat	ctggctgtgc	tatgcggcct	1200
tcgtgtgtgt	ccgcggctcc	taccagtctc	tcgtgcccct	cgccaccttt	cagattgcat	1260
cttctctgtc	taaagagctc	tgtgccctgg	tcttcggggg	caacacgttc	tttgccacca	1320
tcgtcaagac	catcatnact	ttcattgtct	cggacgtgcg	gggcctgggc	ctcccggtcc	1380
gcaagcagtt	ccagttatac	tcctgttact	tcctgatcct	gtccatcctc	tacttcttgg	1440
gggccatgtc	ggatggcctg	cggcactgcc	agcggggcca	ccaccgcgg	cagcccccg	1500
cccagggcct	gaggagtgc	gcggaggaga	aggcagcaca	ggcactgagc	gtgcaggaca	1560
agggcctcgg	aggcctgcag	ccagcccaga	gcccgcgct	ttcccagaa	gacagcctgg	1620

0996333 099401



gggctgtggg	gccagcctcc	ctggagcaga	gacagagcga	cccatacctg	gcccaggccc	1680
cggcccccca	ggcagctgaa	ttcctgagcc	cagtgacaac	cccttcccc	tgcactctgt	1740
gctccgcca	agcctcaggc	cctgaggctg	cagatgagac	ttgtccccag	ctggctgtcc	1800
atcctcctgg	tgtcagcaag	ctgggtttgc	agtgtcttcc	aagcgacggg	gttcagaatg	1860
tgaaccagt	actctcgggc	gccccgtgtg	taactttgca	ggcggccctc	agtgcacccc	1920
cacgaccct	gcctcagagg	ccgcctgcct	tagcaatggg	ggcctccgct	tatcctgcta	1980
gcaggccccc	taggatnccc	cctgccctgt	gcgcactct	ggcggtgggc	acagcgtgct	2040
ggcgacactc	agggcagctg	cctggccatg	ctgtccctgc	actgtgcccc	gcgggctttg	2100
ttgctgngaa	gaggtgggtg	gtgggtcttct	gcgtccacca	ggcctcactg	gctcatgccc	2160
cttggggggc	ttgagacaaa	tcctttctgc	ccccagggc	tagtgaagtg	gcctcttgga	2220
taccagctca	ggggacactg	gccccacagg	agttgtgagc	cctctagggc	aggggtgggag	2280
ccgggaccct	caggtgtagc	tgagctgtga	cattgctggt	catccttggg	gctcttgctt	2340
ttttgaaaga	tgcttttttt	ttttttaact	gacgtagaat	gaagaactgc	atgtggcttc	2400
tctgtctctg	tggaaaagcc	atctcaggtt	ggcggcagac	acattgtcat	cagaggggag	2460
cagcggctct	ggtcctcgga	gctggttcct	ctctcccacc	ctaagggcag	ccctccatgg	2520
tcctgtctgt	ccttctgaag	tgtgtccatc	ctgacctgcg	ggtcctcagc	tgctcccaca	2580
ctngtgccag	cccgaggggg	actggctccg	gtcaccnggg	acgtgctggc	cttgggtatgt	2640
gccaggcttg	ccngggctgg	gcagccttgg	gggggctgcc	tttgtggtgg	gcgctgggga	2700
agtacgtccc	agcggcctca	gggtctaagg	agcgctagtg	ccttgcccac	aggtgcggga	2760
ccatctgatg	tgatgtgaat	actcttccca	catacatata	acacacttaa	gtgaga	2816

&lt;210&gt; 5

&lt;211&gt; 3772

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; 431, 441

&lt;223&gt; n = a or g

&lt;221&gt; misc\_feature

&lt;222&gt; 498

&lt;223&gt; n = c or t

&lt;221&gt; misc\_feature

&lt;222&gt; 579, 599

&lt;223&gt; n = g or c

&lt;400&gt; 5

gatcccccat	ttccagccaa	caaatccttt	ttaagttcct	ttgagatttg	ttacgtgtgc	60
ttgctacact	caggactctg	gaaagaagcc	caggccagag	ctttgggcag	gcggccattt	120
aggcaagggc	cctgtgtttg	cttcctgggt	gggttgccct	gctggtgggc	gggagaccaa	180
gagcaccccc	gcaacaccag	gaggcaggtc	gcggattgtg	ctgtctacac	tccggaaggg	240
gtacattcca	ggctgtgtcc	ccagactcac	ccctcgcttg	ggaccgcac	tcttgagctg	300
tgggtaccac	ggtggccgtc	cccttctgtt	ctgtgcagtg	gacttcctgg	ctcctcctta	360
gccttggggc	cccacagccc	tcggcttggc	ttccctcccc	atagccaggc	cctgggtaac	420
tccaggggaa	ngtgaccctg	nggcccccca	cttctccccg	tgctcctgca	caggccttgg	480
gctttcggcg	gtgctgtntg	ccgcagcccc	acgccttcct	gggagagtgg	cccaggcccc	540
ccttcctgag	tgtgactgcg	ctgccgtctg	cgaggcctnc	gcgggtctcc	cccgggctnt	600
cctgctggga	tggggactgg	tggccccggg	ccacgtcctg	gatccggctt	gctccttggg	660
acaagccgta	cgggtcacgg	tcaggcagga	gggcggggcg	cgggggtccc	ggggcgccga	720
gttcggggcg	tgcggtcccc	aagagcaggc	tgtgcgtgtc	cctgttgagg	ccccacgaag	780
gcggcccagg	gcacccctga	gggcgcgtgg	gcccagccgc	gtcccggatc	cagcttgctc	840
caggaatgca	ggtgttccag	ggtgccaaaa	ggaaaacgca	caaggcctcg	tcgaggaggg	900
ggggtcagga	ggggaccggg	ggtggggaaga	acgcggggga	gagggatggc	aggggtgccc	960
cccaggggac	cgacacctcc	gcgagtggca	ccccaggatg	ctgacgcggg	cgggggtggg	1020

F04269.EE9650

ggccccgaggg	gcgggtcgggg	tcagggggg	gccccagggg	tagggccgca	gcacgagggg	1080
ccgctgacc	cggcggtgac	cgggtgggga	gaggccggcg	ccggggctgg	gagacggccg	1140
tgggtgggag	ggtgccccgt	ggggacgctc	ctgccgcagc	gcccggccac	gcgcgagggc	1200
ccgccctcag	gacgcgttcg	cgggacggac	ccgccacccc	cgcagccgcc	ggccccccgc	1260
gcgccttgtg	ggcgctgtag	tcccggagtc	cgctgcgcg	gggcccgggtc	cgggagcccc	1320
agggcagccg	ccccgccgag	tcgcaggtac	cgggtgggaa	cggggccacg	gggcgcggtg	1380
cgggggctgc	ggggtgtctc	ggggccctgg	ggtgagtgcg	gggcgcgggc	cagggtttgc	1440
agggccctgt	gaggtgagtg	tgggggctgg	cgctggggtc	cgcggggccc	tggggagggg	1500
gcggggcgctg	ggccgggggtc	tgcgggtctgc	agcctggggg	ccgcggggcc	tggggagggg	1560
gcggggcgctg	gcccgggggtc	gcgggtctgca	gcctgggggtc	tggggggccc	tggggagggg	1620
gcggggcgctg	ggccgggggtc	tcgcgggggt	cgcggtggcc	cgggggcctg	gcagaaccgt	1680
tgtctgtcac	ggggtttccc	gccgctcgct	ttccgcgcga	gcctgcgaat	gggggtgggga	1740
gtcccggggc	ccagcctgcc	ctccgcgtca	tcctggggcg	ccaagtccca	cccccgggtc	1800
tggaggaaaag	cgtggatccg	cgttcgcgcc	caggcacgtg	ttgcttcggg	acgggccagc	1860
cgggtgggtga	accctgccag	ccacgcgtgg	ggcgggcccc	tggcacatct	ccagaccatt	1920
gtctctctgtg	ccagaagctt	tgtagggtgca	acttccccctt	ggagcagctg	tgggtgcgga	1980
tccagcggac	gaatcccag	gcgtctcaga	gagagcctgg	acagccgctg	gagcctttcc	2040
cgagtgggtc	cttccaacac	cgctacagca	ggaaagccat	ccccctaggg	tcctgtccat	2100
cggaaactcc	tgtcctgggg	agtctgcctg	cctggcctca	ggacacaggg	caactaagct	2160
ggccccgaaa	tccagaatgc	atccagaggg	aaggtgggat	aaagtccttg	gagcgcctgt	2220
tggccgccct	gtaaagaggt	ggcctcccc	tacggagacc	cagggatccc	cgcacagccc	2280
agattcaatc	agcagagccg	aggtgcctct	ggcccagtg	acctgcctgc	cctgtccagg	2340
cctgggagcc	aggctgcac	tcactggccg	cctttgcctg	ggtgccacct	gtgcactgct	2400
tgttgcaatt	gctaattgct	ttctttccga	agggcttttg	aggattttta	taattccaga	2460
tagtacagtt	atctctgctg	gacacagatg	agaaagagtg	cttctcgggt	gtttgggcct	2520
gcagcagtga	tagccggagg	tctaattatg	ctgttaggaa	ccctgaactt	ggtcactctga	2580
acaggggtgg	gaggggtgtgc	aatgctttct	tcttcttctt	cttcttttta	aactagcagg	2640
cgttctaaaa	aacataacga	acattcttgg	ttagccttcc	agagtaggag	ctggtttaaa	2700
cacggaatga	taggtggcgt	ttgcttgggt	tttgattg	ggtctctggc	cttctctggg	2760
gcttggaagg	acagggcctg	ggtggggctg	gtcactgtgg	acagtggggc	cggggatttg	2820
caggggctgt	tacaaccttc	tcctgaaggc	agggattctc	tctgcttccc	cgtggccctc	2880
ctgtctgggtc	ggggacttcc	ttcagatgcc	gggaagaggg	ctcaagctgt	atgggactgg	2940
gctgggggtct	ggacacttgg	agtctaggcg	tcccctggct	tggggctg	tttctatgat	3000
ggtgaccaag	ttccctatct	ttcctcttgg	aggtggtctg	ggccgtgatg	gccaagcctc	3060
tgtcagtggg	ctacgttcac	ggcacataag	ttgagtatgc	tggcagcaga	ggctgactgt	3120
taagaccagc	agcagccctt	tgtggcgga	gactctggct	gtctctccaa	ggaaggaatg	3180
ttctgttcgc	ttctggaggt	ggcaccttcc	agaacagggg	gcccaggtac	ccagggtctc	3240
cgggccccctg	ggggtcctgt	gggtgggatc	tgactcctgc	ggccatggac	tgtgggcgca	3300
gaccctgggc	ttagtccagc	tcctgatggc	tcccctgtgt	ctgcggcgat	ctgggtgtctc	3360
tgggtgtctg	gggatcgggtg	cgctgtctca	aaactgctga	caggtgggaa	agtgaacttg	3420
acagggagtc	ccagggccaa	atgggtctcc	cagtggggag	gagtgggtgc	ggtctgaggt	3480
atgtccagct	ctaccctgtg	cctctctggg	catcagggtc	cctggtgatg	gagcccaacc	3540
tttgtgcact	gatcttccca	gctgttgaca	ggccctgagg	aggcgtggaa	ggtgaggccg	3600
aggcaggcga	ccgtcagatc	tgccctggcc	tggcagtggc	ccctgectgc	gcttccctct	3660
gectggccgg	ctgttttcat	cctggccctt	tgagaacttc	tagggtcctg	gctgectcca	3720
atggagggtg	ctggtcccat	cttcttccca	gctgtgccct	gccgtggagc	tc	3772

&lt;210&gt; 6

&lt;211&gt; 1536

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; 1066

&lt;223&gt; n = t or c

CCGCGGCTG

<221> misc\_feature

<222> 1136

<223> n = a or g

<221> misc\_feature

<222> 1497

<223> n = t or a

<400> 6

gggggggggg	ggaccacttg	gcctgcctcc	gtcccgccgc	gccacttggc	ctgcctccgt	60
cccgccgcgc	cacttcgcct	gcctccgtcc	cccgcccgcc	gcgccatgcc	tgtggccggc	120
tcggagctgc	cgcgccggcc	cttgccccc	gccgcacagg	agcgggacgc	cgagcccgct	180
ccgccgcacg	gggagctgca	gtacctgggg	cagatccaac	acatccctccg	ctgcggcgctc	240
aggaaggacg	accgcacggg	caccggcacc	ctgtcggtat	tcggcatgca	ggcgcgctac	300
agcctgagag	atgaattccc	tctgctgaca	accaaactgtg	tgttctggaa	gggtgttttg	360
gaggagttgc	tgtggtttat	caagggatcc	acaaatgcta	aagagctgtc	ttccaaggga	420
gtgaaaatct	gggatgccaa	tggatcccga	gacttttttg	acagcctggg	attctccacc	480
agagaagaag	gggacttggg	cccagtttat	ggcttccagt	ggaggcattt	tggggcagaa	540
tacagagata	tggaatcaga	ttattcagga	cagggagttg	accaaactgca	aagagtgatt	600
gacaccatca	aaaccaaccc	tgacgacaga	agaatcatca	tgtgcgcttg	gaatccaaga	660
gatcttccctc	tgatggcgct	gcctccatgc	catgccctct	gccagttcta	tgtggtgaac	720
agtgaagctgt	cctgccagct	gtaccagaga	tcgggagaca	tgggcctcgg	tgtgcctttc	780
aacatcgcca	gctacgccct	gctcacgtac	atgattgcgc	acatcacggg	cctgaagcca	840
ggtgacttta	tacacacttt	gggagatgca	catatttacc	tgaatcacat	cgagccactg	900
aaaatttcagc	ttcagcgaga	acccagacct	ttcccaaagc	tcaggattct	tcgaaaagtt	960
gagaaaatttg	atgacttcaa	agctgaagac	tttcagattg	aaggggtacaa	tccgcattcca	1020
actatttaaaa	tggaatggc	tgtttaggg	gctttcaaag	gagctngaag	gatattgtca	1080
gtcttttaggg	ggtgggctgg	atgccgaggt	aaaagttctt	tttgctctaa	aagaanaagg	1140
aactaggtca	aaaatctgtc	cgtgacctat	cagttattaa	tttttaagga	tggtgccact	1200
ggcaaatgta	actgtgccag	ttctttccat	aataaaaaggc	tttgagttaa	ctcactgagg	1260
gtatctgaca	atgctgaggt	tatgaacaaa	gtgaggagaa	tgaaatgtat	gtgctcttag	1320
caaaaacatg	tatgtgcatt	tcaatcccac	gtacttataa	agaagggttg	tgaatttcac	1380
aagctattttt	tggaatat	ttagaatatt	taaagaattt	cacaagctat	tcctcaa	1440
ctgagggagc	tgagtaacac	catcgatcat	gatgtagagt	gtgggttatga	actttanagt	1500
tgttttatat	gttgctataa	taaagaagtg	ttctgc			1536

<210> 7

<211> 1187

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 276, 321, 534, 656

<223> n = c or t

<221> misc\_feature

<222> 452, 640

<223> n = a or g

<221> misc\_feature

<222> 492, 625

<223> n = c or a

<221> misc\_feature

<222> 458

<223> nucleotide in position 458 is c, or absent

099633.0940.1

```

<210> 8
<211> 18597
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 701, 13751
<223> n = c or a

<221> misc_feature
<222> 716, 1293, 2401, 2429, 2618, 3083, 3125, 3635, 4256, 4898,
5062, 5167, 11069, 13298, 14479, 14730, 14796, 15344, 15450,
15503, 15590, 15840, 16149
<223> n = a or g

<221> misc_feature
<222> 732, 1379, 1590, 2488, 3212, 5006, 11238, 11422, 11686,
12598, 13171, 13645, 13782, 13806, 13813, 14586, 14788,
15042, 15546, 15770
<223> n = c or t

<221> misc_feature
<222> 1322, 1688
<223> n = c or g

<221> misc_feature
<222> 2594, 11293, 16199, 16203
<223> n = g or t

<221> misc_feature
<222> 3619
<223> n = a or t

```

&lt;221&gt; misc\_feature

&lt;222&gt; 14547

&lt;223&gt; nucleotide in position 14547 is t, or absent

&lt;400&gt; 8

cctgtagtcc	cagctacgcg	agaggctgag	gcagcagaat	tacttgaacc	caggaggcgg	60
aggttgagct	gagccgagat	cgcgccactg	cactccagcc	tgggtgagag	agcgagactc	120
tgtctcaaaa	aaaaaaaaaa	aagaccgcca	gggctcaaac	aaaaaacctc	ggaaaagccc	180
tggcgggtctt	tttttttttt	tttttttttt	ttttttggga	cagtcttget	ctgtcgccca	240
ggctggagta	caatggtcgg	atcttggtct	actgcaacct	ctgcctccca	ggttcaagca	300
attcttctgc	ctcagcctcc	caagtagcca	ccacgcccag	ctaatttttg	tacttttagt	360
agagacgggg	gtttcaccat	gttgctccagg	ctggctctga	actcctgacc	tcagggtgatc	420
caccgcctc	ggccccccaa	agtactagga	ttacaggcgt	gagccaccgc	gtccagcgcc	480
ctggcgggttt	ttaatcaagt	agaaaagctg	cattatacca	cttgcttcgg	ttgcttcagt	540
gagaacgaag	aaatggaaat	gcaaatccct	tattagtgtg	aggaaacaga	tctcaaacag	600
cagttttgtt	gacaagaccg	caggaaaacg	tgggaactgt	gctgctgggt	tagagaaggg	660
gcggctcgacc	agacgggttc	caaagggcgc	agtccttccc	ngccaccgca	cctgcntcca	720
ggttcccggg	tntcctaaga	ctctcagctg	tggccctggg	ctccgttctg	tgccacaccc	780
gtggctcctg	cgtttccccc	tggcgacgc	tctctagagc	gggggcccgc	gcgaccccgc	840
cgagcaggaa	gaggcgagc	gcgggacggc	cgcgggaaaa	ggcgcgcgga	aggggtcctg	900
ccaccgcgcc	acttggcctg	cctccgtccc	cccgccccac	ttggcctgcc	tccgtcccgc	960
cgcgccactt	cgcttgcttc	cgcccccg	cccgccgcgc	atgctgtggg	ccggctcgga	1020
gctgccgcgc	cggtcccttg	cccccgccgc	acaggagcgg	gacgcccagc	cgctcccgc	1080
gcacggggag	ctgcagtacc	tggggcagat	ccaacacatc	ctccgctgcg	gcgtcaggaa	1140
ggacgaccgc	acgggcaccg	gcaccctgtc	ggtattcggc	atgcaggcgc	gctacagcct	1200
gagaggtgac	gcccggggcc	cctgcggggac	gggtggcggg	aaggaggagg	gcgcggctgg	1260
ggagagcgct	cgggagctgc	cgggcgctgc	ggccccggtt	tagtcctaac	ctcaatcctg	1320
cnagggaggg	gacgcacgtg	cctcctcgcc	ttacagacgc	cgaaacggag	ggtcccacna	1380
gggacgtgac	tggcgcgggc	aacacacaca	gcagcgacag	ccgggaggta	agccgcctcc	1440
cagcggctcc	gcggccgggg	tgcagtcgc	ccagtgatg	ccgtggcccc	cgaggcgggc	1500
gtcatcgggc	agcgtttgcc	cagtgctgga	gggttaggga	gagctgcctg	ggcttgaccg	1560
cgcgccggtc	tcaaagtcct	ggctttggcn	cctcctccgt	tttcccctgt	ggaccattcc	1620
gcttcgcagc	gttttcaaaa	actggagcga	aagtgatgtg	ggcggggcaa	aggcggcggg	1680
aagagganag	cactgaagct	ggcgcgggaa	cttggtttcc	tgggtggcctc	ccatccaatc	1740
cccacgaacc	agctttcttc	ttaaaccctg	aaaagagaaa	ttcgggagtt	cgagttctta	1800
gtcgtccttt	cctctttcct	ttccgacagg	agcaccgccg	gcaaaaaatg	tctcgcgggg	1860
catttgcgcc	aggctttcag	gggacagtgg	ggcgggcgcg	ggtgggcaca	ggacgttagg	1920
cagccgttgg	ccctccctaa	ggccacaccg	tccgtcgctc	ctggatcctg	cgccagctgc	1980
gcgggggagg	ggactcgaag	gtgtgtgagc	caggggctga	ccttgaccgc	tcagataaat	2040
ggagcgcagc	cttgacacag	gggtggaggt	ggttttgaat	ggggaaaccc	attcgtgggt	2100
aagcagattc	actgtagcta	gcggaaaagc	cctccggccc	acggacccat	ctagagacga	2160
atacatagca	gctgctgtgg	ctgattggcg	tgggacagcg	tggggagttt	tgtctgagga	2220
gagggatcca	cttttctgca	gctccaagcc	caggggcctt	tgatgagcca	tagacctcat	2280
ttttaaccca	cctttctgct	tagacattga	gcaagttact	tctcatatag	cttccctata	2340
tgttaaaaat	ggagaaaata	atgcttagta	ggcaattctg	ataaaaagcag	gtgcttgcaa	2400
naatctctct	gttgtctgaa	tataaaactnt	accacaagcg	agtgcggatg	aacgaggact	2460
gcatttaaaag	ataagttttt	acacttttnat	ttctctgtgg	ctcgacactt	ctgatgcctc	2520
cctttttgtt	cctgggacac	atgcttgggtg	ttgtcttcac	acctttgtga	caggattagc	2580
actagtgggc	agtn gatgat	agctcctcct	cccttttncc	acatgttcat	ccctgccttc	2640
gccaccatct	cactgtgtgg	aattcctgtg	tccactgggtc	accggggcac	agaagtgtctg	2700
tctcagcctg	aatcggggcca	ctgatggggac	ttgcagcctg	ggagctccac	cgtagctctt	2760
ggcccacttt	gcgggagtct	aggctttctg	gatgctccag	gcctcacgtc	ccagggcagt	2820
tttcttccct	gaagaaagtt	ggatggcatg	atctgtcttc	ccatcttgaa	accgtatggc	2880
aaattgtttt	tcagatgaat	tccctctgct	gacaacccaa	cgtgtgttct	ggaagggtgt	2940
tttgaggag	ttgctgtggg	ttatcaagggt	aaagaagtcg	ctgctattag	aagtcagttag	3000
tctgttctca	acacgacgagc	cagttagatc	ctttcaaaac	tcaaagcagc	cagggtgtggt	3060
ggctcacgcc	tgtaatccca	ccnctttggg	aggctgagtc	agatcacctg	aggtttaggaa	3120

09963323 092404

tttnggacca	gcttggccaa	catggcgaca	ccccagtctc	tactaataaac	acaaaaaatt	3180
agccaggtgt	gctgggtgcat	gtctgtaatc	cnagctactc	aggaggctga	ggcatgagaa	3240
ttgctcacga	ggcggagggtt	gtagtgagct	gagatcgtag	cactgtactc	cagcctggcg	3300
acagagggag	aacccatgtc	aaaaacaaaa	aaagacacca	ccaaagggtca	aagcatatca	3360
ttcctcacc	tcaagccctt	agtggctcca	tttactcag	taagagccac	ggtccttatg	3420
gtgtccgttt	ttcagctctg	accttagctg	ctgctctctg	caccaccctg	ctgttcttgt	3480
gagtttttga	gcacaccggg	acatccccac	tccttggaac	cttcttcccc	cacacttggc	3540
ttcttccctt	gagtctctac	tccactcggg	caagccttcc	tagacctcct	gatttaaaac	3600
tgtgactctc	ccccaacnnc	cttgggtgtt	ctccntagac	gaacatcacc	atctgatgta	3660
tgtcagcctt	tcctttcccc	tgttagaagg	gggacagcag	gtagtataag	tgaaatgtgc	3720
tgtaagcttt	atgagggcag	aggatttgtt	tctcgtgttc	actgttgtat	cgccagggcc	3780
tcaaacacag	cctggccacat	agtaggagtc	aacatatatt	gatcactaaa	tgtagatacc	3840
acctgtgttc	ccatgttcat	ataaattcta	gaagagtctc	ttcagtaaca	aggtgaaccc	3900
cttccagagg	gctgagtagg	tacctcaggc	cggggccaga	gtgctgtgaa	gacagcagca	3960
gccagacca	agcttctctg	tgttccgtgt	cctgggtctag	aaccagcgat	gttctttctg	4020
accagtgttt	tttggaaagg	ggctgaggtc	tgggctcagg	tctggggccat	actagaagct	4080
gggatccctt	ctatagagca	cttgggtatg	cttgtatggt	cttggggcaa	gccagaccca	4140
agccctctta	tcccatttta	gaaagggttt	caatttggat	ccagccccag	gtctgcctta	4200
gctctgtatt	cttgggggat	tttgttctgt	attggcctat	cttgactaac	aatganccct	4260
ggattttgaaa	catatcatca	gaaacctcag	aagacaacat	tcttaaaactg	gctagagcct	4320
ggctctgaatg	gatgaaaagg	agagactttt	gaagcaatat	gtaaaagatt	gagaaatgat	4380
ttgttggaat	tttctcaatt	ggagaaaatt	ctttgatttg	ttggaaattt	ctttgattct	4440
ttctcaatca	aagaaaatcg	ggacaaaact	aacaatagaa	agggagggaag	caagatactc	4500
agaaaataaaa	tgcattcccc	tgtttcaact	taatgcttca	attcaggatt	ctaagggaatc	4560
cttgccagga	atgtcagact	caccttgata	gttggagtta	ctccattggg	gactcgatca	4620
aatacaggag	ttgaggcacc	tgcactgtaa	aatactgatt	agtctgatca	ttaggaatat	4680
cctgtatgcc	aggtagaaga	tacattgaac	agattgcatg	taggcattaa	attcattttg	4740
gggtattaca	tatagacaac	acattttcatt	aagaaaacata	aaactgtcag	atcgggtgaa	4800
tacttaaaaag	cacttggagg	tgtttagcct	aaaaagctta	gttgagggga	atggaaagaa	4860
agatctgggga	gggtggttcc	aaagaaggga	tcagactntc	ctaaagccct	caggaatctg	4920
ggctggggacc	acctacttaa	agataggatg	ggcagctggg	tgtggtggct	cacgcctgta	4980
atcccagcac	ttcgggaggc	cgaagnnggc	ggatcacctg	aggtcaggag	ttcagggccca	5040
gctgaccaaa	catggagaaa	cncgtgtctc	actaaaaata	caaaattagc	tgggtgtagt	5100
ggcgcatgcc	tgtaatccca	gctactcggg	aggctgaggc	aggggaatcg	cttgaacctg	5160
ggaggtnag	ggtgccgtga	gccacgatcg	cgccatttga	ctccagcctg	ggcaacaaga	5220
gcgaaactct	caaaaaacaa	aaaaaaggat	gggttccata	tgggtggtgt	caagtgccca	5280
cctcctagca	agtcagcagg	ggccagaggc	ccttgttaagt	ggtgtctcgg	gggatccaac	5340
tgagatggct	taagatttac	ctggatgcct	gctctgtctc	ccccatctct	tccaggggatc	5400
cacaaatgct	aaagagctgt	cttccaaggg	agtgaataat	tgggatgcca	atggatcccc	5460
agactttttg	gacagcctgg	gattctccac	cagagaagaa	ggggacttgg	gcccagttta	5520
tggcttccag	tggaggcatt	ttggggcaga	atacagagat	atggaatcag	gtgaggagat	5580
agaacaatgc	cttccatttc	cgggtgccct	tcctagcacg	tgtttgctcc	gttgttttag	5640
ataaggtctg	ggggatgagt	caatgtcaca	ggagctgatg	tatagctttg	accttgtgag	5700
gggtggtgcc	aggttgaagc	cacaattaac	gcctactgaa	ggcgttttca	catctttttt	5760
tttttttttt	ttttaattat	tatactttta	gttttagggg	acatgtgcac	aatgtgcagg	5820
ttagttacat	atgtatacat	gtgccatgct	ggtgcyctgc	accactaact	caccatctag	5880
catcagggtat	atctcccaat	gctatccctc	ccccctctc	ccacccca	acatccccag	5940
agtgtgatgt	tccccttcc	gtgtccatat	gttctcgttg	ttcgattccc	actatgagtg	6000
agaatatgag	gtgttttggt	ttttgttctt	gcgatagttt	actgagaatg	atgatttcca	6060
tttcaccacg	tccttacaga	ggacatgaac	tcattcattt	ttatggctgc	atagtattcc	6120
atggtgtata	tgtgccacat	tttcttaatc	cagtctatca	tgttggacat	ttgggttggt	6180
tccaagtctt	tgcctattgt	gaatagtgcc	acaataaaca	tacgtgtgca	tgtgtcttta	6240
tagcagcatg	attttaatagt	cctttgggta	tataccagct	aatgggatgg	ctgggtcaaa	6300
tggattttct	agttctagat	ccccgaggaa	tcgccacact	gacttccaca	atggttgaac	6360
tagtttacag	tcccaccaac	agtgtcaaa	tgtccatttt	ctccacatcc	tctccagcac	6420
ctgttttttc	ctgacttttt	aatgattgcc	atttctaactg	gtgtgagatg	gtatctcatt	6480
gtggttttga	tttgcgtttc	tctgatggcc	agtgatgggtg	agcatttttt	catgtgtttt	6540

ttggctgcat	aaatgtcttc	ttttgagaag	tgtctgttca	tgtccttcgc	ccactttttg	6600
atggggttgt	ttttttctta	taaatttgtt	tgagttcatt	gtagattctg	gatattagcc	6660
ctttgtcaga	tgagtaggtt	gcaaaaatgt	tctcccattt	tgtgggttgc	ctgttcactc	6720
tgatggtagt	ttcttttgc	gtgcagaagc	tctttagttt	aattagatcc	cattttgtcaa	6780
ttttggcttt	tgttgccatt	gcttttggca	taggcataaa	gtccttgccc	atgcctatgt	6840
cctgaatggt	aatgcctagg	ttttcttcta	gggtttttat	ggtttttaggt	ctaacgttta	6900
agtctttaat	ccatcttgaa	ttgattttttg	tataagggtgt	aaggaaggga	tccagtttca	6960
gctttttaca	tatggctagc	cagttttccc	agcaccattt	attacatagg	gaatcctttc	7020
cccattgctt	gtttttctca	ggtttgcata	agatcagata	gttgtagata	tgcggcggtta	7080
ttcttgaggg	ctctgttctg	ttccattgat	ctatgtgtct	gttttggtac	cagtaccata	7140
ctgtttttgt	tactgtagcc	ttgtagtata	gtttgaagtc	aggtagcgtg	atgcctccag	7200
ctttgttctt	ttggcttagg	attgacttgg	cgatgcgggc	tcttttttgg	ttccatatga	7260
actttaaagt	agttttttcc	aattctgtga	agaaagtcat	tggtagcttg	atggggatgg	7320
cattgaatct	ataaattacc	ttgggcagta	tggccatttt	cacgatattg	attcttcccta	7380
cccatgagca	tggaatggtc	ttccatttct	ttgtatcctc	ttttatttca	ttgagcagtg	7440
gtttgtagtt	ctccttgaag	aggctccttc	catccctttt	aagggtggatt	cctagggtatt	7500
ttattctctt	tgaagcaatt	gtgagtggaa	gttcactcat	gattttggctc	tctgtttgtc	7560
tgttattggt	gtataagaat	gcttgtgatt	tttgcagatt	gatttttata	cctgagactt	7620
tgctgaagct	gcttatcagc	ttaaggagat	tttgggtcga	gacaatgggg	ttttctagat	7680
atacaatcat	gtcgtctgca	aacagggaca	atttgacttc	ctcttttctc	aattgaatac	7740
cctttatttc	cttctcctgc	ctaattgccc	tggccagaa	ttccaacact	atgttgaata	7800
ggagtgggtga	gagagggcat	ccctgtcttg	tgccagtttt	caaaggggaat	gcttccagtt	7860
tttgccatt	cactatgata	ttggctgtgg	ctttgtcata	gatagctctt	attattttga	7920
aatatgttcc	atcaatacct	aattttattga	gagtttttag	catgatgtgt	tgttgaattt	7980
tgtcaaagge	tttttctgca	tctattgaga	taatcatgtg	gtttttgtct	ttggatctgt	8040
ttatatgctg	gattacattt	attgatttgc	gtatattgaa	ccagccttgc	atcctaggga	8100
tgaagcccac	atgatcatgg	tggataagct	ttttgatgtg	ctgctggatt	cggtttgcca	8160
gtattttatt	gaggattttt	gcatcaatgt	tcatcaagga	tattggtcta	aaattctctt	8220
ttttggtgtg	tctctgcccc	gctttgggtat	caggatgatg	ttggcttcat	aaaatgagtt	8280
agggaggatt	ccctcttttt	ctattgattg	gaatagtttc	agaaggaatg	gtaccagttc	8340
ctctttgtac	ctctggagaa	ttcggctgtg	aatccatctg	gtcctggact	ctctttgggt	8400
ggtaagctat	tgattattgc	cacaatttca	gctcctgtta	ttgggtctatt	cagagattca	8460
acttcttcct	ggtttagtct	tgggagagtg	tatgtgtcaa	ggaatttatc	catttcttct	8520
agattttcta	gtttatttgc	gtagagggtg	ttgtagtaat	ctctgatggg	agtttgtatt	8580
tctgtgggat	cgggtggtgat	atccctctta	tcattttttt	ttgcgtctat	ttgattcttc	8640
tctttttctt	tattagtctt	gctagcggtc	tataaaattt	gttgatcctt	tcaaaaaacc	8700
agctcctgga	ttcatttaatt	ttttgaaggg	ttttttgtgt	ctctatttcc	ttcagttctg	8760
ctctgatttt	agttatttct	tgccttctgc	tagcttttga	atatgtttgc	tcttgccttt	8820
ctagtctctt	taattgtgat	gttaggggtg	caatttttga	tctttcctgc	tttctcttgt	8880
gggcatttag	tgctataaat	ttccctctac	acactgcttt	gaatgtgtcc	cagaggttct	8940
ggtagtggg	gtctttgttc	ttgttgggtt	caaagaacat	ctttatttct	gccttcattt	9000
cgttatgtac	ccagtagtca	ttcaggagca	ggttgttcag	tttccatgta	gttgagcagt	9060
tttgagttag	attcttaatc	ctgagttcta	gtttgattgc	actgtggtct	gagagatagt	9120
ttgttataat	ttctgttctt	ttacatttgc	tgaggagagc	tttacttcca	actatgtggg	9180
cggtttttga	ataggtgtgg	tgtggtgctg	aaaaaaatgt	atattctggt	gatttggggt	9240
ggagtctctg	agatgtctat	taggtctgct	tgggtgcagag	ctgagttcaa	ttcctgggta	9300
tccttgttga	ctttctgtct	cgttgatctg	tgtactgttg	acagtgggtg	ttaaagtctc	9360
ccattattaa	tgtgtggagt	ctaagtctct	ttgtagggtc	ctcagatgat	tggcacttac	9420
tgggcgcttg	gcactttcca	tactgtgtca	tcggcagata	gctgcaggtg	tgggtgtcgt	9480
gctgggggaat	gggaagtcca	tcgggtgggac	aaggacaaaa	tgccccctatt	gctttgttgt	9540
ggctttaatc	tccttttcca	ggctgagcca	cagcgtgctg	taggtggcgc	tgctgtgaag	9600
cgcagtacca	gggtcacact	ccactcccag	ctctgcagag	gtggagaaaag	aatgaaacat	9660
ctcactcctg	gacttccact	ttcctgtcac	tgttgggtgc	acctcttact	ggatgtcaca	9720
gagccagccc	ctcccccact	gtgcctagga	aaagcagatg	ccaccttggg	atgtgggggt	9780
tgtgtgtgca	atttactagc	tgggcagaga	ccagcaacct	ggagagcagg	tgtctcgtct	9840
aaggggacag	tcacatttca	cctccagcca	cctggaggaa	tttgggcctg	gtgatgtcag	9900
aattcttcaa	taaaagccta	aaatctatat	tttatgtgcg	gtcatgagat	ctgttaaatg	9960

ttagcaactt	caggaagttt	aaaaatgctg	tgtggaccta	gaataggcaa	gttcttaaag	10020
gcagaaagt	gaatgctagt	ttccagggac	tggggaacag	ggaggaatgg	ggagtccatg	10080
tttaatgggc	acagaggttt	tgtaggggat	gacgaaaaag	ttcgggagat	ggtgatgggtg	10140
atggagatgg	tgatgggtgat	ggagatgggt	atgggtgatgg	tgatgggtgat	gggtgatgggt	10200
gatgggtgatg	gtgatgggtga	tggagatgggt	gatgggtgatg	gtgatgggaga	tgggtgatgggt	10260
gatgggtgatg	gtgatgggaga	tgggtgatgggt	gatggagatg	gtgatgggtga	tgggtgatggga	10320
gatgggtgatg	gtgatgggtga	tgggtgatgggt	gatgggtgatg	gtgatgggaga	tggagatgggt	10380
gatgggtgatg	gttgccctaac	atcaggaacg	tgcttaatgc	ttctgaattg	cacacaaaaa	10440
tggcaagttt	aatattatgt	gtactttatc	acaatgaaaa	aagctgctgc	gtgggccaag	10500
ttactttgtgc	aggtaatgtt	ctgcaggtgg	ttgcctgcac	ctcagttgta	gggtgtccgt	10560
aggatgtgag	gccagtcccc	gggcttaatg	atgctttaaa	tccctgctag	tattcaatta	10620
tttcttgtcg	cttaaaaggc	ctaataaaaa	tatggctcta	gtttacagtg	gtatgaatgc	10680
ttagctgttg	gatttttagta	ggaaagttcg	tccctttttg	tttttaattt	tgttttacag	10740
attcacagga	atTTTTTTTT	TTTTTTTTTT	TTTTTTTTTT	taatgcacag	aaagtTtccc	10800
tggactctct	accagttttc	cccagtgata	atatcttggg	taacatcctg	tatacattca	10860
cattgggtgca	ttcctcagag	ttgtcagatt	ttgctagttt	tacgtgcact	tgtgtatgtg	10920
tgtatttgca	atTTTtagcac	gtgtagactc	ttgtaaccac	tacaatcaag	ttacagaact	10980
acactacca	ggttcatctt	tttaaaatct	ttgatgttac	ctTTTTtggg	acagtgacca	11040
tgagaggact	ttcctcccaa	aatttttgana	actactgaac	cagaatatag	tctgacacta	11100
ataggtagaa	atTTtaacca	aggagattat	gaagctctgc	acttgagtta	acaaaatcac	11160
ttctcagctt	ccagttccat	ctcagaagga	aggaaaaagg	attaaaaaatc	cagagaccag	11220
aaaatggggag	caaagtanaa	gggtggtgtaa	tcattacaga	ggtttccctga	tgtttccaag	11280
tcagtcgtgt	gtngagctgc	taaaactctaa	agtaattttta	gggtggaatgt	tggaaacatg	11340
ctgctgaggt	gatagaaagg	aatccatgggt	cctctgttag	ttggaaaagta	tatggaatac	11400
tatattctac	ataagataca	anactctctg	tgagacaagg	ataaagtaga	ttttgtcagt	11460
gaaattgtga	caagaatcgc	tgatgggttt	agagcctaag	tttgcgagga	gcactggaag	11520
aaattaagat	tgttgagatt	ggaaaggggt	agctatgggg	gaacaggagg	agggtgactcc	11580
atgacagacc	aaatattcaa	aggactgtgt	agaagaggaa	aaagactttg	ttagggctcc	11640
agaggacaga	gccaggagtc	agacagggcc	ttgaactcaa	cccacngaga	tctgcaaact	11700
ttgcaggatg	caccagatgt	cttgtagcca	tgggtcaaagg	ggggaccctg	ggtaagagac	11760
tgtaatagat	gacctctaag	gccatctcat	gacatgtgtg	attaatgtat	gtacctgtcc	11820
tctctttttg	acaattctac	agattattca	ggacagggag	ttgaccaact	gcaaagagtg	11880
attgacacca	tcaaaacca	ccctgacgac	agaagaatca	tcatgtgcgc	ttggaatcca	11940
agaggttgaa	agaaccccg	cgtcttcatt	tatactaacc	atactcttag	agggaagcaa	12000
tctggttttg	tgacagaggca	ctgagggagg	caggaccctg	ggcaacttcc	cccagccaca	12060
tggttgtgtg	acgttgggca	agtcacattt	tgctgcactt	tcaccttcag	atcatgaggt	12120
tggggccaga	ggattttttt	TTTTTTTTTT	TTTTTTtgaga	cagagttttg	ctctgttgcc	12180
caggctggaa	tgcaacggcg	tgatcttggc	tcactgtaac	ctctgcctcc	tgggttcgag	12240
tgattctcct	gcctcagcct	ccaagttagct	gggattacag	catgtgccac	catgcctggc	12300
taatttttgta	tttttagtag	agacgggttc	acatgttgggt	caggctgggtc	ttgactcctg	12360
accctcagat	gatctgcctt	gcctcagcct	cccaaccgag	tgatcttaag	ttgtgtatta	12420
tactcattct	tacacaaaaa	gggcttttaa	tgccctagaaa	ctacatgaag	atgttaacat	12480
tttaaatgga	agcagatgaa	gttccagctc	gctgccacct	cactaacatt	tttaacaatt	12540
atattgtaaa	attcaactct	accaggggtg	agagccaggt	gtgggtggctc	acacctgnaa	12600
ttccaacaac	tccagaggcc	aaggcgagag	gatcatttga	accacaggaa	tttgaggctg	12660
tagtgagtca	tgatcacgcc	attgcactcc	atcctgggca	acagagttag	accctgaata	12720
tttaaaaaaca	acaacaacaa	caaaactcta	tcaggatata	ataagtactt	agagtgaat	12780
acttgcattc	gtaatagaga	cttatttttt	TTTTTTTtga	gacacagtct	cacctgttg	12840
cccaggctgg	agtgcagtgg	tttgcctccc	gctcacggca	acctccatct	cccaggttca	12900
agtgagttcc	cattcctcag	ccccagagct	gggaccacag	gcgcgcgaat	ttttgtatTT	12960
ttagcagaga	cggggtttca	ctatgttggc	caggctagtc	tcaaaactcaa	gttggcctca	13020
agtgatctgc	ccacctgggc	gtcccagtgt	tgggatttca	ggcatgagcc	actgtgcctg	13080
gccatgtaat	agagactttt	aatataggag	ggtgtaccag	aagcaccagt	ttcctgtggc	13140
aaacagaatt	attcctgctg	tattttgtaat	ntggtgccac	gaggtagccc	agatcccttc	13200
agctctgatg	gaagagcatt	gcttcagccg	taaatggaga	cctgcagaaa	ccttgcaccg	13260
atggtatagc	tccctcagct	cgtgccatc	gctgcagnng	ctgttatgga	catcactgca	13320
gccagtgggc	tctctctcct	ggtctccacc	atatgagttg	gcttctgttt	ctctcctgtt	13380



ttacttttgcc	tttagctgtg	gtcttttcaaaa	ccaccatccc	tccttatctt	cctctgctgg	13440
ttcctcagat	cttctctctga	tggcgctgcc	tccatgccat	gccctctgcc	agttctatgt	13500
gggtgaacagt	gagctgtcct	gccagctgta	ccagagatcg	ggagacatgg	gcctcgggtg	13560
gcctttcaac	atcgccagct	acgccctgct	cacgtacatg	attgcgcaca	tcacgggcct	13620
gaaggtgggc	tgtctcggga	agggngactt	gccagcctac	cacatgagct	cttcagttct	13680
ttaatatggg	aaaacaaatt	gcagagttaa	gtctctgatt	agcttttaaa	tttgatatgt	13740
gtaagtaaga	natgaaccag	cttttacttt	gaaaccttcc	tnntctggaa	ggttttctgg	13800
ccctgnggta	tangcactaa	cagatctata	cagggtgttt	gtgatacagc	ttctatggat	13860
cttctcaaaa	gctatgctga	ggttgggtat	gggtggctcat	gectgtaate	ccagcacttt	13920
ggaagactga	gacaggagca	attgcttgag	gtctggagtt	caataccagc	ctgggcaaca	13980
taacaagatg	ctgttgctac	aaaaaaaaatg	aaaagctaca	ctaaattatt	tttttaaaaa	14040
aagccttgcg	gtgtctgcat	attctaattgt	ttttaaatga	tgtttttaaag	aattgaaact	14100
aacatactgt	tctgctttct	cccggtttat	agccagggtga	ctttatacac	actttggggag	14160
atgcacatat	ttacctgaat	cacatcgagc	cactgaaaat	tcaggtaaga	attagatggt	14220
atacttttgg	gtttgggtacc	ttctcttgat	aaaagggtga	ctgtggaaca	ggatatctgct	14280
caatgctgtg	tccaagataa	agatgactgc	tccaaatgtg	gggcttcagt	ttagggagaa	14340
gtggtgggca	gggtgggcagg	acaaggcagg	catctgcctc	agcaaccatg	gcacttaact	14400
tgtcaggtgc	tgtgaggtac	taagcaccag	taccagagag	ggaagagcca	cattcaagcc	14460
aggggattgt	ccaaaaggng	gcattttaac	tcattttaac	ttgaaggaga	attgaagtgc	14520
aaatgctttt	ctttttcttt	ttttttgnag	atggagtctt	tctctgtcgg	ccaggctgga	14580
gtgtgncgtg	gtgcgactct	agctcactgc	aacctccacc	tcccgggttc	aagcaattct	14640
tctgcctcag	cctcccagg	agctgggatt	acaggcacat	gccaccacac	ccagctaatt	14700
ttttgtatta	ttagtagaga	tgggggttctn	tcagtgtggc	caggctgatc	tcaaactcct	14760
gacttcaagt	gtaccacctg	cctcagcttc	cgaaanttct	ggaattacag	gcataagcca	14820
ccaccctggc	cataaatatt	ttttgttaat	tttacattaa	gtacaatatt	taggtccaaa	14880
cttcaaaagt	ctgttgaaat	ccctgaagtt	atagcagcca	acaattgata	tgaatggcca	14940
ataaaaaatgt	aagttcatct	gcttcatgag	ccttaaggaa	aaaaactcag	aaccagacac	15000
tttttagccc	cttccagggt	agatccagg	tttaaaagtt	antcctttga	gggagtttgg	15060
ctgcttttga	gtggagggtga	cttcaggctt	attctctctg	gctctctgct	ctggtcattt	15120
ttagacatag	taatagggtg	tgacctgtct	tcacatccta	attgccactg	tctgttcatc	15180
ccaggaatcc	tggctttcat	ccctttctgt	tcactgtcca	tgcagtcat	ctttccttct	15240
ttctgccagg	gaccagatgg	gttagggatt	gtgaattcaa	gtaaacgtag	agctactatg	15300
agttacagat	tgactgtgtt	cctgtcttta	ataaatttgc	caanagtgg	tataagaact	15360
tacacctgat	gaggcaccag	gctcctgatg	ctgtgtaatg	tcacaaaata	ccctcactc	15420
tcgatctgtg	caagagaaca	gctgggtgcn	ctccaatcat	gttacataac	ctacgcgaag	15480
gtatcgacag	gatcatactc	ctntaaaata	gaactttggt	gatcacatcc	tgtgtacttt	15540
tttcanggac	atgaggagca	attacaacag	gtcgtacaat	tatggcaaan	taatggcctt	15600
attttgtttt	tagcttcagc	gagaaaccag	acctttccca	aagctcagga	ttcttcgaaa	15660
agttgagaaa	attgatgact	tcaaagctga	agactttcag	attgaaggg	acaatccgca	15720
tccaactatt	aaaatggaaa	tggctgttta	gggtgcttcc	aaaggagctn	gaaggatatt	15780
gtcagctctt	aggggttggg	ctggatgccg	aggtaaaagt	tctttttgct	ctaaaagaan	15840
aaggaaactag	gtcaaaaatc	tgtccgtgac	ctatcagtta	ttaattttta	aggatgttgc	15900
cactggcaaaa	tgtaaactgtg	ccagttcttt	ccataataaa	aggctttgag	ttaactcact	15960
gagggatatct	gacaatgctg	aggttatgaa	caaagtgagg	agaatgaaat	gtatgtgctc	16020
ttagcaaaaa	catgtatgtg	catttcaact	ccacgtactt	ataaagaagg	ttggtgaatt	16080
tcacaagcta	tttttggaa	atttttagaa	tattttaaga	atttcacaag	ctattccctc	16140
aaatctgang	gagctgagta	acaccatcga	tcagtatgta	gagtgtgggt	atgaacttna	16200
aanttatagt	tgttttatat	gttgctataa	taaagaagtg	ttctgcattc	gtccacgctt	16260
tgttcattct	gtactgccac	ttatctgctc	agttccttcc	taaaatagat	taaagaactc	16320
tccttaagta	aacatgtgct	gtattctgg	ttggatgcta	cttaaaagag	tatatatttag	16380
aaataatagt	gaatatat	tgccctat	ttctcatttt	aactgcatct	tatcctcaaa	16440
atataatgac	catttaggat	agagtttttt	tttttttttt	ttaaactttt	ataaacttaa	16500
agggttat	taaaataatc	tatggactac	cattttgccc	tcattagctt	cagcatgggtg	16560
tgacttctct	aataatatgc	ttagattaag	caaggaaaag	atgcaaaacc	acttcgggggt	16620
taatcagtga	aataattttt	ccttcgttgc	ataccagata	cccccggtgt	tgcacgacta	16680
tttttattct	gctaatttat	gacaagtgtt	aaacagaaca	aggaattatt	ccaaccaagt	16740
atgcaacatg	ttgcttattt	tcaaattaca	gtttaatgtc	taggtgccag	cccttgatat	16800

agctatTTTT	gtaagaacat	cctcctggac	tttgggtag	ttaaactctaa	acttatTTTaa	16860
ggattaagta	ggataacgtg	cattgatttg	ctaaaagaat	caagtaataa	ttacttagct	16920
gattcctgag	ggtggtaga	cttctagctg	aactcatctt	gatcggtagg	atTTTTTaaa	16980
tccatTTTTg	taaaactatt	tccaagaaat	tttaagccct	ttcacttcag	aaagaaaaaa	17040
gttggtgggg	ctgagcactt	aattttcttg	agcaggaagg	agtttcttcc	aaacttcacc	17100
atctggagac	tgggtgttct	ttacagattc	ctccttcatt	tctgttgagt	agccgggac	17160
ctatcaaaga	ccaaaaaaat	gagtcctgtt	aacaaccacc	tggaaacaaa	acagattTTa	17220
tgcatttatg	ctgctccaag	aaatgctttt	acgtctaagc	cagaggcaat	taattaattt	17280
TTTTTTTTT	gacatggagt	cactgtccgt	tgccagagct	gcagtgcagt	ggcgcaatct	17340
tggctcactg	caacctccac	ctcccaggtt	caagtgattc	tcttgctca	gcctcccatg	17400
tagctgggat	cacaggcacc	tgccaccgtt	cccggctaatt	TTTTTgtatt	TTTTgtagag	17460
acagggTTTT	accatgttgg	ccaggctggt	ctcaaacacc	tgacctcaaa	tgatccacct	17520
gcctcagcct	cccaaagtgt	tgggattaca	ggcgtaagcc	accatgcccc	gccctgaatt	17580
aatatTTTTa	aaataagttt	ggagactggt	ggaaataata	gggcagagga	acataTTTTa	17640
ctggctactt	gccagagtta	gttaactcat	caaactcttt	gataatagtt	tgacctctgt	17700
tggtgaaaat	gagccatgat	ctcttgaaca	tgatcagaat	aaatgcccc	gccacacaat	17760
tgtagtccaa	actTTTTtagg	tcactaactt	gctagatggt	gccaggTTTT	TTTgcacaag	17820
gagtgcaaat	gttaagatct	ccactagtga	ggaaaggcta	gtattacaga	agccttgtca	17880
gaggcaattg	aacctccaag	ccctggccct	caggcctgag	gattttgata	cagacaaact	17940
gaagaaccgt	ttgttagtgg	atattgcaaa	caaacaggag	tcaaagcttg	tgctccaca	18000
gtctagttca	cgagacaggc	gtggcagtg	ctggcagcat	ctcttctcac	aggggccctc	18060
aggcacagct	taccttgga	ggcatgtagg	aagcccgtg	gatcatcacg	ggatacttga	18120
aatgtctcatg	caggtggtca	acatactcac	acaccctagg	aggagggaat	cagatcgggg	18180
caatgatgcc	tgaagtcaga	ttattcacgt	ggtgctaact	taaagcagaa	ggagcgagta	18240
ccactcaatt	gacagtgttg	gccaaaggctt	agctgtgtta	ccatgcgttt	ctaggcaagt	18300
ccctaaacct	ctgtgcctca	ggtccttttc	ttctaaaata	tagcaatgtg	aggtggggac	18360
tttgatgaca	tgaacacacg	aagtcctct	gagaggTTTT	gtggtgccct	ttaaaaggga	18420
tcaattcaga	ctctgtaaat	atccagaatt	atttgggttc	ctctggtcaa	aagtcagatg	18480
aatagattaa	aatcaccaca	TTTTgtgatc	tatttttcaa	gaagcgtttg	tattttttca	18540
tatggctgca	gcagctgcc	ggggcttggg	gtttttttgg	caggtagggg	tgggagg	18597

<210> 9

<211> 2500

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 128, 1464

<223> n = g or a

<221> misc\_feature

<222> 189

<223> n = t or g

<221> misc\_feature

<222> 524

<223> n = c or g

<221> misc\_feature

<222> 1399

<223> n = t or a

<221> misc\_feature

<222> 1636, 1738, 2259

<223> n = c or t

```
<210> 10
<211> 1718
<212> DNA
<213> Homo sapiens
```

```
<220>  
<221> misc_feature  
<222> 183, 1299  
<223> n = g or a  
  
<221> misc_feature  
<222> 483  
<223> n = c or t
```

<221> misc\_feature

<222> 601

<223> n = g or c

<400> 10

atggggcttg	gggctggg	gccagacgct	aactcggatg	ctcccaggct	acgccttggc	60
catgaccgct	gcggecggc	gccccgcct	tcaccttcgg	cgcgcgcttc	cccacgcagc	120
agacgacgtg	cgccccggg	ccaggccacc	tggtgcccgc	tcgcatgacc	gtgcgcggca	180
ccnacggcgc	ccccgcctac	tccatctacg	gccgcccacg	ccgctcagcg	cccttcctca	240
ctccgggacc	tggtcaggac	ccccggggcc	ctggccaccc	caacgccgaa	ctgcgtccag	300
ggaggcccac	ctgggaaccc	ccgacctgaa	ccccgagtcc	ccctcggata	ccctaacacg	360
atattcggta	cccccatatc	cggatctcaa	atcccaaacc	ccgaacccac	ggggctttga	420
taaatcgtgg	ctcagactcc	ccactagtcc	caggacccca	tctcgggtac	ccaccaggct	480
ccnacgcagt	tctagcccc	cacacccttg	atccgccccg	caggcaggta	cttcccggag	540
cgagcgggga	acgcgacgta	ccccagtgcg	cctcggcaca	ccattgctcc	ccgaaactgg	600
ngtgtccagg	cggaacagca	gagcccaggt	cccgcggcct	atacgggtgc	ctcgtctctg	660
ggtccgcgcg	tcacggcaa	agtctccgcc	ccaacttgct	ccatctacgg	ccgcagagcg	720
gctggcagtt	tcttcgagga	cctcagcaag	gtcgtgagtc	caggggtcta	caagtcccgg	780
gccccccagt	tcacgattct	ggcgcggact	tcgctcccc	aagacaacac	tcggaagcca	840
gggcccgcgg	cctacaacgt	ggatcagcac	cggaagcccc	gcggctggag	tttcgggatc	900
cggcactcgg	actacctggc	cccgtgtgtg	accgacgcgg	acaactgacc	cgccaggcgg	960
gagcggcccc	acacgtgttt	gcttaaagtc	tgcgagtccg	catcgtgtcc	gcctctctct	1020
ctctctctct	gcgcgtcctg	gcgcaaggcc	tggggtggag	ccacggctgg	ggccgtgtcc	1080
caactccgaa	cccagcgggg	cggggcccga	gcgtcgggcg	aggccgggac	cccagcgtcg	1140
cgccgcgtcc	gaacgtcgag	accccaccga	gggcgggagg	gggactctcg	ggagccacag	1200
acgcccgaga	cccacgcggg	gcgggaccgg	ccagggatca	ccccgcgga	cggccccggg	1260
ccccgacggc	cgggaagtcc	cgcgtgtccg	ggggcaccng	gggattggcc	ggggcgcggc	1320
gtgcaaggct	tcccgggggc	ggcgactgcc	gagctccgcc	ctccaggcgg	ccccaccgcg	1380
ctgcgctcct	ggggcgccgc	cgccccgcgg	ccggcagtg	accgctgtgc	gcgaacctctg	1440
aaccttacgg	tcccgaccgc	cgggcgaggg	cgggtacctg	ggctgggatc	cggagcaagc	1500
gggcgagggc	agcgccctaa	gcaggtacgg	gcggggctca	agtcgcgagg	cgggggaagcg	1560
ggaggcagac	acggacgagg	gcgacacaga	cacgggaccg	aggggcggac	accggagaga	1620
cacgggaaag	gggtcgggac	aggagcacgt	ggctcagaca	ccgacgccgg	gaggccgcag	1680
accccgagac	tgtcaggcat	ccccgcaggc	ccggagcg			1718

<210> 11

<211> 5847

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 124, 3346, 5024, 5484, 5650

<223> n = c or t

<221> misc\_feature

<222> 439, 1333, 1979, 2151, 2469, 2977, 4784, 5268, 5631, 5733

<223> n = g or a

<221> misc\_feature

<222> 1045

<223> nucleotide at position 1045 is c, or absent

<221> misc\_feature

<222> 1046

<223> nucleotide at position 1046 is t, or absent

0996333.092401

<221> misc\_feature  
 <222> 2636, 5287  
 <223> n = c or g

<221> misc\_feature  
 <222> 3118  
 <223> n = g or t

<221> misc\_feature  
 <222> 3257, 4053  
 <223> n = a or c

<221> misc\_feature  
 <222> 5440  
 <223> n = t or a

<400> 11  
 gatattcggg accccatata cggatctcaa atcccaaacc ccgaacccca cggggctttg 60  
 ataaatcgtg gctcagactc cccactagtc ccaggacccc atctcgggta cccaccaggc 120  
 tccnacgcag ttctagcccc ccacaccctt gatccgcccc gcaggcagggt acttcccggg 180  
 gcgagcgggg aacgcgacgt accccagtgc gctcggcac accattgctc cccgaaactg 240  
 ggggtgtccag gcggaacagc agagcccagg tgaggtcaga acggcccatc ccagaactgt 300  
 gggccttccc actcgagacc ggggaccgcc ctccgggagc tgggaccacc ctgcgcctgt 360  
 ccgcgagagc cccactacccc cgagccctgc ctctcccca ggtcccgcgg cctatacggg 420  
 gccctcgttc ttgggtccnc gcgtcatcgg caaagtctcc gcccacactt gctccateta 480  
 cggccgcaga gcggctggca gtttcttcga ggacctcagc aagggtggggg aggggcgggg 540  
 gcggacgcag ggggtccctg gtccgcggca gtggaggcgg cagccagcac cctctgcect 600  
 ctgcagacc cggggccctt gcgcctatca ggtcgtgagt ccagggggtct acaagtcccg 660  
 ggccccccag ttacgattc tggcgcggac ttcgctcccc caagacaaca ctcggaagcc 720  
 agggcccgcg gcctacaacg tggatcagggt ggctggagc ccagggtcaa gggtcagagt 780  
 caggagagtg gggagggcct gaggtcggag tgatgggagc agagtccccg ggggtccagg 840  
 ggtcccggcg cggagaggat gccggccccg cgaggtcagc ggtgtctccg ggcccgcagc 900  
 accggaagcc ccgcggctgg agtttcggga tccggcactc ggactacctg gcccgcgtgg 960  
 tgaccgacgc ggacaactga cccgccaggc gggagcggcc ccacacgtgt ttgcttaaag 1020  
 tctgcagtc cgcctcgtgt ccgcnctct ctctctctct ctctgcgct cctggcgcaa 1080  
 ggccctggggg ggagccacgg ctggggccgt gtcccaactc cgaacccagc ggggcggggc 1140  
 ccgagcgtcg ggcgaggccg ggaccccagc gctgcgccgc gtccgaacgt cgagacccca 1200  
 ccgagggcgg gagggggact ctcgggagcc acagacgccc gagacccacg ccgggcggga 1260  
 ccggccaggg atcacccccg ccgacggccc cgggccccga cggccccgaa gttccgcgtg 1320  
 tccgggggca ccnggggatt ggccggggcg cggcgtgcaa ggcttcccgg gggcgggcag 1380  
 tgccgagctc cgcctccag gcggccccac ccgcctgccc tctggggcg ccgcgcgcc 1440  
 gccgcggca gtggaccgct gtgcgcgaac cctgaaccct acgggtcccga cccgcggggc 1500  
 aggcgggta cctgggctgg gatccggagc aagcgggcga gggcagcgcc ctaagcagg 1560  
 acgggcgggg ctcaagtcgc gaggcgggga agcgggaggg agacacggac gagggcgaca 1620  
 cagacacggg accgaggggc ggacacccga gagacacggg aaaggggtcg ggacaggagc 1680  
 acgtggctca gacaccgacg ccgggaggcc gcagaccccg gacgtgtcag gcatccccgc 1740  
 aggcggcgag cgatggcagc cttgatgacc ccgggaaccg gggccccacc cgcgcctgg 1800  
 gacttctccg gggaaggag ccagggaactt cccgaccctt cgccagagcc caagcagctc 1860  
 ccggagctga tccgcataaa gcgagacgga ggcgcctga gcgaagcgga catcaggggc 1920  
 ttctgtggcg ctgtgggtga tgggagcgcg cagggcgcac agatcgggtg gtggggagng 1980  
 ttgggcgttc ctgaccccga ctgggaggtc agcccagag actttgggtc cctgggggtg 2040  
 cgacggtgcc ccactaccag caccggcccc aggggtgcccc accgctgtgg gctgccacc 2100  
 tcacgcgtac cccacatac caggggccat gctgatggcc atccgacttc ngggcattga 2160  
 tctggaggag acctcgggtc tgacccaggc cctgggtcag tccggacagc agctggagtg 2220  
 gccagaggcc tggcgccagc agcttgtgga caagcattcc acaggggggtg tgggtgacaa 2280  
 ggtcagcctg gtccctgcac ctgccctggc ggcattgtggc tgcaagggtta gaaaccacct 2340

095333 09404

cctttccaga	cgggagccta	taccgcacat	gcagcaacca	gtccatccac	aggcagctcc	2400
caacctcaag	cctggcccaa	agcctccaag	accctacca	ggcttctccc	cacctgctc	2460
cccagcacng	ttctccccac	cccgttcccc	agcacagcgc	ttggggcccc	tctggctcca	2520
gaccaggccc	cttggagcag	gaaaaagatc	cactgatgga	attcagaccc	ctttcccctt	2580
gggtccccag	acagctcccc	caagggagga	gctgaggact	tcctccctc	tgccnaagc	2640
cttgtttccc	caaggagagg	taccaacctc	ctccctact	gacacttctc	aaccaagaaa	2700
acttcctttc	cattccctca	ccagctgggc	accctatag	ctgcttaa	actttccaaa	2760
tccagctgca	ctcctagcca	gggaagggtga	agggatgcac	agaggtgggg	gaggggtact	2820
gtgcagggtg	ctcagcatec	ctgaccacca	ggtgccaatg	atcagcggac	gtggtctggg	2880
gcacacagga	ggcaccttgg	ataagctgga	gtctattcct	ggattcaatg	tcattccagag	2940
cccagagcag	gtacggggcg	ccacggatca	ctcattnatc	caggttgatg	atccagacc	3000
tggccagaat	cactaaaaga	tcactgggtg	atcattaggg	tcactaatga	gaacactggt	3060
caaggttact	catgagtcac	tgggectggg	ccgaaatcat	cagtggaaact	ttgattanga	3120
tcataaaatg	ggaagttggt	caaaatcaca	gatggctggc	ggggcacggt	ggctcacacc	3180
tgtagtcccta	gcacttgggg	aggccgaaga	gggcagatcc	cttgaacca	ggagttcaaa	3240
accagcctgg	ataacanggc	aaaaccccat	ctctacaaaa	tagttcgctg	cgtgtggtgg	3300
tgcacgcag	tggttccagc	tactcaggag	gctgaggcag	gaggancact	tgagcctggg	3360
aggtctaggg	tgagtgagc	cgggacgatg	ccactgcact	ccagcctggg	caacagagtg	3420
agacctgtgc	ccgacactct	gggaggcaga	ggagcccagt	tggagatcag	cctgggta	3480
atagtgaac	ttgatctcta	caaaaaaaag	aagaaaaaaa	aaagccgcgt	gtggtggtgc	3540
gcacctgtag	tcccagctac	tgggaagctg	aggtgggagg	atcacttaag	cccaggaggc	3600
agaggtcaca	atgagccgaa	attgtgccaa	ctgcactcca	gcctgggcaa	cagaggaaga	3660
ctcttcacag	aaaaaaaaaa	aaaaaaaaaag	ctgctaagtc	atttaccata	agtcactgag	3720
aacaggggat	gtctgaccag	atgcaagtgc	tgctggacca	ggcgggctgc	tgtatcgtgg	3780
gtcagagtga	gcagctgggt	cctgcggacg	gaatcctata	tgcagccaga	gatgtgacag	3840
ccaccgtgga	cagcctgcc	ctcatcacag	gtgacctgac	tcctatggcct	gcttctgcat	3900
gttcacaggc	tcctgacctc	caaactcaag	tcaagggcct	ctcgttagga	gttaccgcgc	3960
acctgaccgt	tgccccccct	acccccatca	caagatgcct	gaccaccacc	atgtgggtgg	4020
cctgatactc	aaaccaccag	gtgctgccac	ccncataata	agggacttga	ccctcaatgc	4080
tcaggggcccc	tgacccccaa	gtcggcatcc	ccgaactctc	ccaagaagct	ccaggttctc	4140
cattgtctcc	aacctcctct	gcctccccca	aagcctccat	tctcagtaag	aaactcgtgg	4200
aggggctgtc	cgctctgggt	gtggacgtta	agttcggagg	ggccgcgcgc	ttccccacc	4260
aggagcaggc	ccgggagctg	gcaaagacgc	tgggtgagcgg	tgtggccttt	ccctgggcaa	4320
gcgtcttgat	gcggggccag	cctacccttc	acccctcccg	tcctccactgc	ctccctccac	4380
tcagcagtc	tgccctaacc	cagtcaccac	ctcttctgcc	cgaagtccct	ccctccctca	4440
cggcttcccta	acctgctgtg	acttttagagg	tcaaggctgg	cccgccctgg	acctggggaa	4500
gccctctgtg	gggttccctgc	cccagaccaa	gtacaagtgc	ctcctggccc	catggcgagg	4560
tgtcgcactt	cactcgtgtc	tcttccccac	cccaatcctt	ccctgacttc	atgctggggg	4620
gctggcaacc	cacctgcag	caggggctgg	agttcgacca	agaaccggct	gcagaaggcc	4680
ccgccatggg	gggtccacgc	tgagcctcct	ctccgcaggt	tggcgtggga	gccagcctag	4740
ggcttcgggt	cgcggcagcg	ctgaccgcca	tggacaagcc	cctnggtcgc	tgcgtggggc	4800
acgccctgga	ggtggaggag	gcgctgctct	gcatggacgg	cgcaggcccg	ccagacttaa	4860
gggacctggt	caccacgctc	ggtgaggggg	acggggtgta	ggggagcggg	ggcggcgggg	4920
ggtgcttccc	gctggggccg	ccccgaccgc	gcccgcgccta	agaccgcctc	ccgcccgcag	4980
ggggcgccct	gctctggctc	agcggacacg	cggggactca	ggcncagggc	gctgcccggg	5040
tggccgcggc	gctggacgac	ggctcggccc	ttggccgctt	cgagcgggatg	ctggcgcgcc	5100
agggcgtgga	tcccggctctg	acccgagccc	tgtgctcggg	aagtcccgc	gaacgcgggc	5160
agctgctgcc	tcgcgcccgg	gagcaggagg	agctgctggc	gcccgcagat	ggtgagcgtc	5220
gggggagtc	ccgtccttcc	gcctccgcca	tccccttccc	ttcccgangc	cccgcccctt	5280
cccagagncg	cgctctcag	cccctctccc	cgcaggcacc	gtggagctgg	tcggggcgct	5340
gcccgtggcg	ctgggtgctgc	acgagctcgg	ggccggggcg	agccgcgctg	gggagccgct	5400
ccgctgggg	gtgggcgcag	agctgctggt	cgacgtgggn	cagaggctgc	gccgtggtga	5460
gcgcgcgcc	cgcctgctg	gccncgcacc	cccgccagc	tccggccgcg	cggcctctaa	5520
cagccctcgc	ctctgcagg	acccctggc	cgcgctgca	ccgggacggc	ccgcgctca	5580
gcggcccgca	gagccgcgc	ctgcaggagg	cgtcgtact	ctccgaccgc	ncgccattcg	5640
ccgccccctn	gcccttcgca	gagctcgttc	tgcgcgcgca	gcaataaagc	tcctttgcgc	5700
cgaaaccttg	tcagtgcctg	ggcgggagcg	ganggatcca	gggctgcgga	ggcggggggc	5760

gtctcgatga acacgtgacc cccggcgggc tccgccttcc gcgcacgcgc tgagagcctg 5820  
tcagcggctg cgcccggtg cgcacgc 5847

<210> 12  
<211> 2158  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> 802, 1900  
<223> n = c or t

<221> misc\_feature  
<222> 1747  
<223> n = t or g

<400> 12  
gcgcggcata acgacccagg tcgcggcgcg gcggggccttg agcgcgtggc cgggtgccgca 60  
ggagccgagc atggagtacc aggatgccgt gcgcacgtgc aataccctgc agaccaatgc 120  
cggctacctg gagcagggtga agcgcacagc ggggtgaccct cagacacagt tgggaagccat 180  
ggaactgtac ctggcacgga gtgggctgca ggtggaggac ttggaccggc tgaacatcat 240  
ccacgtcact gggacgaagg ggaagggtc cacctgtgcc ttacacggaat gtatcctccg 300  
aagctatggc ctgaagacgg gattctttag ctctccccac ctggtgcagg ttccgggagcg 360  
gatccgcac ccatggcgagc ccatcagtc tgagctcttc accaagtact tctggcgccct 420  
ctaccaccgg ctggaggaga ccaaggatgg cagctgtgtc tccatgcccc cctacttccg 480  
cttctgaca ctcatggcct tccacgtctt cctccaagag aaggtggacc tggcagtggt 540  
ggaggtgggc attggcgggg cttatgactg caccaacatc atcaggaagc ctgtggtgtg 600  
cggagtctcc tctcttggca tcgaccacac cagcctcctg ggggatacgg tggagaagat 660  
cgcatggcag aaagggggca tctttaagca aggtgtccct gccttcaactg tgcctcaacc 720  
tgaaggtccc ctggcagtg tgagggaccg agcccagcag atctcatgtc ctctatacct 780  
gtgtccgatg ctggaggccc tngagggaagg ggggcccggc ctgaccctgg gcctggaggg 840  
ggagaccag cgggtccaacg ccgccttggc ctgacagctg gccactgct ggctgcagcg 900  
gcaggaccgc catggtgtcg gggagccaaa ggcacccagg ccagggtcc tgtggcagct 960  
gccccctggc cctgtgttcc agcccacatc ccacatgcgg ctccgggttc ggaacacgga 1020  
gtggccgggc cggacgcagg tgctgcggcg cgggcccctc acctgggtacc tggacgggtg 1080  
gcacaccgac agcagcgcg aggcctgcgt gcgctgggtc cgcagggcg tgacggggccg 1140  
cgagaggccg agcgggtggc ccgaggttcg agtcttgtc ttcaatgcta ccggggaccg 1200  
ggaccggcg gcctgtctga agctgtctga gccctgccag tttgactatg ccgtcttctg 1260  
ccctaacctg acagagggtg catccacagg caacgcagac caacagaact tcacagtga 1320  
actggaccag gtctgtctcc gctgcctgga acaccagcag cactggaacc acctggacga 1380  
agagcaggcc agcccggacc tctggagtgc ccccagccca gagcccgggtg ggtccgcac 1440  
cctgtctctg gcgccccacc caccacacac ctgcagtgcc agctccctcg tcttcagctg 1500  
catttcacat gccttgcaat ggatcagcca aggccgagac cccatcttcc agccacctag 1560  
tccccaaaag ggctcctca cccaccctgt ggctcacagt ggggcccagca tactccgtga 1620  
ggctgtctgc atccatgtg tagtcaactg cagcctgcac ctggtgggtg gtgtcctgaa 1680  
gctgtctggg cccgcactgt cccagtagcc aaggcccggg gttggagggtg ggagcttccc 1740  
acacctnct gcgttctccc catgaactta catactaggt gccttttgtt tttggctttc 1800  
ctggttctgt ctgactggc ctaggggcca gggctttggg atgggaggcc gggagaggat 1860  
gtctttttta aggtctgtg ccttgggtctc tcttctctcn tggctgagat agcagagggg 1920  
ctccccgggt ctctcactgt tgcagtggcc tggccgttca gcctgtctcc cccaacaccc 1980  
cgctgcctc ctggctcagg cccagcttat tgtgtgcgct gcctggccag gccctgggtc 2040  
ttgccatgtg ctgggtggtg gatttctcc tcccagtgcc ttctgggaag ggagagggcc 2100  
tctgcctggg aactgcggg acagagggtg gctggagtga attaaagcct ttgttttt 2158

<210> 13  
<211> 2630

0996333-09404

<400> 13						
ctgattggta	tgaggactggt	ggagcccata	gaatgtgcaa	gaccagcctg	ggtgaggagg	60
ctgtcttagt	tgagaccaac	gtggtgaata	gggtgagcca	ggtgcagagg	cctggagata	120
gaagatgggg	aggactgggg	ggctacagat	agtccggggg	gatggggcac	caggaacaaa	180
ccgaggggaca	caggagagat	gagggcacgga	ggccagtagc	atcagtcctt	gcaggggtggg	240
ggaaggccag	gacgcttcggg	aagggtatcc	tgatgacccc	agctgtcccg	gcagctctcc	300
ccacctgggtg	caggttccggg	agcggatccg	catcaatggg	cagcccatca	gtcctgagct	360
cttcaccaag	tactttctggc	gcctctacca	ccggctggag	gagaccaagg	tgccgcctgc	420
aggagggctg	gcgggtgggt	atggttgggg	gtgctacgtg	ttccagcacc	ccatctcccc	480
agagaagggg	ctgcatggct	ctgggccttg	acatgtccct	gtgccacagg	atggcagctg	540
tgtctccatg	ccccctact	tccgcttcc	gacactcatg	gccttccacg	tcttctcca	600
agagaaggtg	tgtgcctct	ccctagaacc	ctgcatctga	ggccttggga	acgggaacct	660
cagcaggct	gggggctccc	tgttccatg	cggcctctgg	gcacctcat	atccctgcc	720
atgcctctg	gtctttgaca	gggtgacctg	gcagtggtg	aggtgggcat	tgggcgggct	780
tatgactgca	ccaacatcat	caggtgagcg	cagttgcttg	ggacgagggg	tggcagccag	840
gagcacagcc	tcacctgcgc	ctgggtggct	agggcaggcc	tcatggcctt	ttctctccct	900
gcaggaagcc	tgtggtgtgc	ggagtctct	ctcttggcat	cgaccacacc	agcctcctgg	960
gggatacgg	ggagaagatc	gcatggcaga	aagggggcat	ctttaagggtg	accaggcaga	1020
ctgggggaag	ggagagacat	ggaaggcctg	ggagtctacg	ttttcatcct	ggcttccactg	1080
tgtgactgga	acaagttgag	tctctctct	agactatttc	cccattgaaa	cgtgagggat	1140
ggctgggcat	ggtggcttat	atgcttgcaa	tcccagcatt	tcaggaggtc	gaggtgagag	1200
gatcacctga	gtatccggagt	ttgagaccag	cctgaccaat	atggggaaac	tctgtctcta	1260
ctaaaaatac	aaaaattagc	caggtgtggt	ggtgtacgcc	tgtagttcca	gctacttggg	1320
agactgaggc	aggagaatca	ctcgaacccg	ggaggcagac	gttgtagtga	gccgagattg	1380
cgccacagca	ctccagcctg	ggtgacagag	tgagacttca	tctngaaaaa	gaaaagaaaa	1440
gaaacatgag	ggatgagaga	cagtggtagc	ccagaccag	ggatgtgggg	gccagagata	1500
ggagtgtgga	ggatgctagg	tagcccttt	tctctccttc	ttccctccac	agcaaggtgt	1560
ccctgccttc	actgtgctcc	aacctgaagg	tcccctggca	gtgctgagg	accgagccca	1620
gcagatctca	gtaagtctga	ttggaatgng	gcagcggcag	ggtgggtttg	tgtccctcct	1680
gttttagagg	gcactgcac	ctctggggcc	tcagtttgcc	catctgtgca	gtgaggacgc	1740
tggggccagct	gccaggcctg	ctggaacaca	tctcagttct	gggagcagg	cttgggtggct	1800
ggggggagggg	agagatgcaa	gggctgacgt	ggtcagggg	ggcctctgct	gaccgcctcc	1860
tgctgtctc	ccctagtgtc	ctctatacct	gtgtccgatg	ctggaggccc	tcgaggaagg	1920
ggggccgcgc	ctgacccttg	gcctggagg	ggagcaccag	cgggtccaacg	ccgccttggc	1980
cttgagctg	gcccactgct	ggctgcagcg	gcaggaccgc	catgggtgag	gggcagctga	2040
gtgggcaggc	aggtgggtg	cacctgtgga	gcctgcctag	gaggtcccg	gacacacttg	2100
gtctcacaca	ccccgcagg	gtggggagc	caaaggcatc	caggccagg	ctcctgtggc	2160
agctgcccct	ggcacctgtg	ttccagccca	catcccacat	gcggctcggt	gagttagacc	2220
ttctgccc	gctgggacca	ctgcgtgtgt	ctgtgcccct	tcagattttt	tttttttttt	2280
ttttggtttt	ctgtttggga	gataagagac	aatttgaagt	ggtgcttaag	agaaaggact	2340
ctgatgtcag	caaacctccc	tgaccttgag	ctcatgaact	ctttctgagc	ctgtcttctc	2400
atctgccaaa	gtagatgatg	ataggagcca	ctgccaccgg	ctgtgggtgg	gattcgctga	2460
ggtgacatca	ctaaggtgct	gagtgacag	cctggccaat	gtgggataaa	gtgccagcca	2520
gtggtagctg	ctgtcactgt	cactatcatc	atcctcagac	cctgaggttc	tggaggatgg	2580
tgatccagtc	atctgcttct	tgctccccc	aaagctttca	gcacccagca		2630



<210> 14  
 <211> 2912  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 263, 1037, 1139, 1955, 2017, 2037, 2189, 2309  
 <223> n = a or g

<221> misc\_feature  
 <222> 266  
 <223> n = g or t

<221> misc\_feature  
 <222> 527  
 <223> n = c or g

<221> misc\_feature  
 <222> 1217, 1647, 2282  
 <223> n = c or t

<400> 14  
 ggccctgcgt ccagtcctctt gattatTTTT atgcagtcac taaactatat acatgcatat 60  
 gtatagagaa agtttcaatg actaaaaata aggaaaccaa gaaagaactt ctctatctgc 120  
 catggggcca gggctcggggc accccagcag tgtgtgaaga gcagaagtc agccaatgac 180  
 agactcttcc caaaacatca cttgcttatt tcgaaatcaa acaatttctc ataaatattt 240  
 tctcccaatg ctgggaagag ggnganggga aggaggtacg gaaactccat caatcatttg 300  
 aagggtcgcc ttttatcaga ctgattttcc gtagtgggtt gtttgcagct tcctcctccc 360  
 cagttctggg cctcagctgt caaaaggatt tcaccatgca actttttcat gctagcagtt 420  
 ggggccaaaga agctaataga tgggaaaaag ctctgaaaac tccaggacga caaatagggtg 480  
 tcctcctcac agaaaaggat tactgccccca ccatccccag gtggccntca aatccgttct 540  
 ctaaacggca gcagctgttt agaggtgtcc accaggtgtc cgcagctttg tcctcctatc 600  
 cctgttcggg gcagagactg agggctgctg acccggaaccg gctattttgg gacgtgctgc 660  
 ggggggcctt gggaggttgg tgacgaaagg agtgcgtgcc cgctaaggga ggggacgccc 720  
 cggagcgtac actcataaac ctggtccccg gcctgcccc tcaccaggat ggtgcacgcg 780  
 gaagggcgcg ctttttagtg gcgcaagggg gctggctcggg ggtagtttgg ggcggtgctg 840  
 attgatggcg ggcgggcgcg ggcggtgctg attggcgggg ggggcggggg gaggcgacgc 900  
 tgcgctgatt ggctgggggc gggcgggggc gtctcccgcc cgggcctaga gcgctgcccg 960  
 gggcgccggg actatgtcgc gggcgcgagg ccacctgcgc gccgctctat tcctggcagc 1020  
 ggcgtctgcg cgcggcntaa cgaccaggt cgcggcgcg cggggccttga gcgctgggcc 1080  
 ggtgccgcag gagccgagca tggagtacca ggtatcaggc gggccagcgg gccagcggnc 1140  
 ctgggcgcga cgacacgtgg gectgcgctg agccgcagaa catccgggct ccgctagccg 1200  
 agagggatc gggagcnctg gactggggga ctcggggggc ggaacatcct ggaggctggg 1260  
 ggtggggaca gggaccagga agttggggcc gggccgcccgg ggctgggaat tcgggagacta 1320  
 tagcgtcccc gccccgggtt gggaagtggg aagtggcaca ggagctagga tccagaagcc 1380  
 cagaggctca gcggtgcttc tggagtcca gtgatcccg agtctgaacc ggcagtgaga 1440  
 gtggggaaag agggtaggga agagactcag gaattcaggc ttgaaagatc caggagtatt 1500  
 gatctggggg tgggctgtcc aggattcaga agattgggga tccaagtgcc tggatttggg 1560  
 ggagaggcag gaatcagggg tagtggaggg cccagaacc tggaaaatag aaaatgtccg 1620  
 cgggcgctgt gtcaagagcc ggttgcncta gaccagacc tcatgccagt gaggcgggtg 1680  
 gcaactggtt gatgagggtg gagcctccaa ccagccttga ggtcctgagg gtgggaggca 1740  
 cggaatatga ggcctaagg gaataaaata gcacccccac tccacttcc attgtgaacc 1800  
 ctccctaagc cgtacctacc tgccttctct gctgagtgac ccctggcaca cccctcctcc 1860  
 ctctgagttg ctctctgtg ggttgaatg tggaaaccca gagtcagtag ggttgggggtg 1920  
 gagcttcggg gaactccaga attcgaatac cccanccttc tgtagttctg gccccgctct 1980

0996333-092401

ggcaggaggc	aatatagcaa	tggaccccat	tggaganaat	gagggcaaag	gcccagnagt	2040
gaagtcgggg	gagcctgggc	aggaagcaag	gctagcccgt	tagtcatgcc	accttctttg	2100
tgtagcactc	cctgggtggg	gctgaactgc	cccagactcc	catttttgcc	agagctggaa	2160
agatgccata	ctctctgttg	cttaacctnc	aggctaggct	aacagtgtctg	gcatggcagg	2220
cgggcctggg	actggccttg	ttgcctgggc	ttggccactg	gtctgctggc	tgtctctgtg	2280
cntgtggacc	ctgagtgage	cttaacctnc	tatctgggca	ctgtggttgc	caggatgccg	2340
tgcgcatgct	caataccctg	cagaccaatg	ccggctacct	ggagcagggtg	aagcgccagc	2400
ggggtgaccc	tcagacacag	ttggaagcca	tggaaactgt	cctggcacgg	agtgggctgc	2460
aggtaaggta	gagagggcct	gtgaccacct	cccaccccca	tttgtgattc	ccgtagctga	2520
ggcaggggacc	ttgtctgtct	gtcccagggtg	gaggacttgg	accggctgaa	catcatccac	2580
gtcactggga	cgaaggggaa	ggtgaggggc	aggaccctgg	ggtagggggg	ctattaagtg	2640
gctggtggag	tagagcctgc	ccagacaatc	ccttttcttt	caagggctcc	acctgtgcct	2700
tcacggaatg	tatcctccga	agctatggcc	tgaagacggg	attcttttagg	tactggcttg	2760
tgggggggatg	tgggtgtctgt	gtcccaatgg	accctggggg	gctatggaac	cagccagtgc	2820
ttcaggacca	gggtcacccc	caggaggtca	gctgcatgtc	tctctgcca	gtgtttattc	2880
attcaataaa	cattcagtta	gcacttacca	ta			2912

&lt;210&gt; 15

&lt;211&gt; 2196

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Synthetic construct

&lt;221&gt; misc\_feature

&lt;222&gt; 1784

&lt;223&gt; n = a or g

&lt;221&gt; misc\_feature

&lt;222&gt; 464

&lt;223&gt; n = g or t

&lt;221&gt; misc\_feature

&lt;222&gt; 120, 519, 668, 1059, 1308

&lt;223&gt; n = c or t

&lt;221&gt; misc\_feature

&lt;222&gt; 1289

&lt;223&gt; n = c or a

&lt;400&gt; 15

aattccggag	ccatggtgaa	cgaagccaga	ggaaacagca	gcctcaaccc	ctgcttggag	60
ggcagtgcc	gcagtggcag	tgagagctcc	aaagatagtt	cgagatgttc	caccccggn	120
ctggaccctg	agcggcatga	gagactccgg	gagaagatga	ggcggcgatt	ggaatctggt	180
gacaagtggg	tctccctgga	attcttccct	cctcgaactg	ctgagggagc	tgtcaatctc	240
atctcaaggt	ttgaccggat	ggcagcagggt	ggccccctct	acatagacgt	gacctggcac	300
ccagcagggtg	acctgtgctc	agacaaggag	acctcctcca	tgatgatcgc	cagcaccgcc	360
gtgaactact	gtggcctgga	gaccatcctg	cacatgacct	gctgccgtca	gcgcctggag	420
gagatcacgg	gccatctgca	caaagctaag	cagctggggc	tgangaacat	catggcgctg	480
cggggagacc	caatagggtga	ccagtgggaa	gaggaggang	gaggcttcaa	ctacgcagtg	540
gacctggtga	agcacatccg	aagtgagttt	ggtgactact	ttgacatctg	tgtggcagggt	600
taccccaaag	gccaccccga	agcaggggagc	tttgaggctg	acctgaagca	cttgaaggag	660
aaggtgtntg	cgggagccga	tttcatcatc	acgcagcttt	tctttgaggc	tgacacattc	720
ttccgctttg	tgaaggcatg	caccgacatg	ggcatcactt	gccccatcgt	ccccgggatc	780
tttcccatcc	agggctacca	ctcccttcgg	cagcttgtga	agctgtccaa	gctggagggtg	840
ccacaggaga	tcaaggacgt	gattgagcca	atcaaagaca	acgatgctgc	catccgcaac	900

09963333 099444

```

tatggcatcg agctggccgt gagcctgtgc caggagcttc tggccagtgg cttggtgcca 960
ggcctccact tctacacct caaccgagag atggctacca cagagggtgt gaagcgctg 1020
gggatgtgga ctgaggacce caggcgctcc ctacctgng ctctcagtgc ccacccaag 1080
cgccgagagg aagatgtacg tcccatcttc tgggctcca gaccaaagag ttacatctac 1140
cgtaccacag agtgggacga gtccctaac ggccgctggg gcaattcttc tccccctgcc 1200
tttggggagc tgaaggacta ctacctcttc tacctgaaga gcaagtcccc caaggaggag 1260
ctgctgaaga tgtgggggga ggagctganc agtgaagcaa gtgtcttnga agtctttgtt 1320
ctttacctct cgggagaacc aaaccggaat ggtcacaaag tgaattgctt gccctggaac 1380
gatgagcccc tggcggtgtg gaccagcctg ctgaaggagg agctgctgag ggtgaaccgc 1440
cagggcaccc tcaccatcaa ctacagccc aacatcaacg ggaagccgtc ctccgacccc 1500
atcgtgggct ggggccccag cgggggctat gtcttcaga aggcctactt agagtttttc 1560
acttcccgcg agacagcggg agcacttctg caagtgtgtg agaagtagca gctccggggtt 1620
aattaccacc ttgtcaatgt gaagggtgaa aacatcacca atgccccga actgcagccg 1680
aatgctgtca cttggggcat ctccctggg cgagagatca tccagccccc cgtagtggat 1740
cccgctcagc tcatgttctg gaaggacgag gcctttgccc tgtngattga gcggtgggga 1800
aagctgtatg aggaggagtc cccgtcccgc accatcatcc agtacatcca cgacaactac 1860
ttcctgggtc acctggtgga caatgacttc cactggaca actgcctctg gcagggtgtg 1920
gaagacacat tggagcttct caacaggccc acccagaatg cgagagaaac ggaggctcca 1980
tgacctgagc tctgacgcc ctgcgttggg gccactcctg tcccgccctc ctctccaca 2040
gtgctgcttc tcttgggaac tccactctcc tctgtgtctc tcccaccccg gcctccactc 2100
ccccacctga caatggcagc tagactggag tgaggcttcc aggtctcttc tggacctgag 2160
tcggccccac atgggaacct agtactctct gctcta 2196

```

```

<210> 16
<211> 1137
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 575, 648
<223> n = t or c

<221> misc_feature
<222> 771
<223> n = g or c

<221> misc_feature
<222> 883
<223> n = g or a

<221> misc_feature
<222> 942
<223> nucleotide at position 942 is c, or absent

<221> misc_feature
<222> 1052
<223> n = a or c

```

```

<400> 16
gaattcaaac catggtttac taaactccaa agctggagcc cttctacagt ctcaggatct 60
agaacaggga ttattactat ctctgctgtt gacatgagga aactgtggtt cagggaggtc 120
aagtgcacct ccaaagcttg tacacatgga aagtagtaga accaggatgc aaacacattt 180
ctttaccacc aacaccaata tctattttgc caacaaaaca atgagggggc ctgagtaaata 240
aatctcaacg gttaactcca cctccaatt gagatacttt tttttttttt ttttttttga 300
gacaggggtc ggctctctgt caccaggtc ggaatgcagt ggtgccctca gcttcccaag 360
tagctaggac tacaggccac atgccaccat gccagctaa tttttgtatt tttttagtaa 420

```

acagggtttt	gccatattgc	caaggctggt	ctcaaactcc	tgggctcaag	cagtcctcct	480
gcctcagcct	cctaaagtaa	gagaagttgg	aaggaaaatg	ggtgaaaata	agaagttct	540
cagttatact	gcagcttggt	catgcctcct	gcctngggat	gccgcagtgg	ctgccccagc	600
cctgcccctt	cagcctcagc	ccttccctca	gtgaaggaga	gaaaaagnga	tttaacaaag	660
tgaggactgt	cagcccttgg	accttggacc	tttgagatct	catgacccac	ccctcagtgt	720
gtccaccagt	gagagtgggt	cctaagggag	agtgtgaagc	acacgtggca	ntgtcttaca	780
ccacacctgc	tgagtccaaa	ccatggggagg	ctcctctcct	agaccctgca	tcctgaaagc	840
tgcgtacctg	agagctgcgg	tctggctgca	gggacacacc	canggggagg	agctgcaatc	900
gtgtctgggg	ccccagccag	gctggccgga	gctcctgttt	cncgctgctc	tgetgcctgc	960
ccggggtagc	aacatggccc	agaagcgtcc	tgcttgcacc	ctgaagcctg	agtgtgtcca	1020
gcagctgctg	gtttgctccc	aggaggccaa	gnagtcagcc	tactgcccct	acagtcactt	1080
tcctgtgggg	gctgccctgc	tcaccagga	ggggagaatc	ttcaaaggta	aaggtgg	1137

23450 888550